

KANT'S METAPHYSIC OF EXPERIENCE

A COMMENTARY ON THE FIRST HALF OF THE
KRITIK DER REINEN VERNUNFT

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IN MATRIS MEMORIAM



‘The writings of the illustrious sage of Koenigsberg, the founder of the Critical Philosophy, more than any other work, at once invigorated and disciplined my understanding. The originality, the depth, and the compression of the thoughts; the novelty and subtlety, yet solidity and importance of the distinctions; the adamantine chain of the logic, and, I will venture to add (paradox as it will appear to those who have taken their notion of Immanuel Kant from Reviewers and Frenchmen), the clearness and evidence of the *Critique of Pure Reason* . . . took possession of me with a giant’s hand.’—COLERIDGE.

P R E F A C E

IT is a scandal to philosophical scholarship, and not least to German philosophical scholarship, that, more than a hundred and fifty years after the publication of the *Kritik of Pure Reason*, we still lack a commentary comparable with such works as that of Pacius on the *Organon* of Aristotle or even that of Adam on the *Republic* of Plato. Of all the authors who write about Kant's greatest work there is none who condescends to explain it sentence by sentence: Hans Vaihinger, who alone set out to do so, attempted to write a commentary, not only upon the *Kritik*, but upon all its previous commentators; and, as was but natural, he gave up this impossible task when he had proceeded but a little way. In the absence of a detailed commentary we have an inevitable welter of conflicting opinions about Kant's doctrines. More serious still, the unfortunate student and even, if I may judge from my own experience, many teachers of philosophy have the vaguest idea as to the meaning of Kant's words. There are sentences in which the reader is unable to decide to which of several nouns the relative and demonstrative pronouns refer, or which of two nouns is to be regarded as subject and which as object. In vain do we look for a reliable guide even in these elementary matters; and the plain fact is that most students find many passages, and too often crucial passages, to which they can attach no meaning at all. It is not surprising that they accept the opinions of others at second-hand without being able either to confirm or to criticise them.

It is not my aim to write a commentary of the type required: this is a task which should be reserved to a German writing for Germans. Nevertheless where the language is most difficult, and especially in such passages as the Transcendental Deduc-

tion and the argument of the Analogies, I have attempted to analyse Kant's thought almost sentence by sentence; and everywhere I have sought to give chapter and verse for my interpretations, so that the reader may be able to make an independent estimate of their truth.

A method of this kind is not without its disadvantages. If difficulties are dealt with in detail, the explanation is bound itself to be difficult; yet it must be remembered that a commentary on the *Kritik*, by the very nature of its subject matter, cannot be light reading; and its usefulness must depend on the extent to which it explains real difficulties, or at the very least explains where the real difficulties lie. Again, if this method is followed, Kant's many expositions of the Transcendental Deduction must impose a good deal of repetition on the commentator; but there is no way of understanding the argument except by studying its details; and any reader who believes he has mastered the details can confine his attention to Chapters XXX and XXXI, where I set out my general interpretation and criticisms. The chief disadvantage is not, I think, either the inevitable concentration on difficulties or the occasional repetitions, but the real danger that in the mass of minor problems the reader may fail to see the main lines of the argument. I can only say that I believe Kant's doctrine to be a whole, and humanly speaking a consistent whole; and I have sought throughout to interpret the details as elements in such a whole. I might have attempted merely to expound my own view of his central doctrine; but unsupported by details it could not be expected to carry conviction, and in any case my primary aim is not to advocate a particular theory, but rather to place the student in such a position that he can set aside the theories of others and read Kant intelligently for himself.

Every commentator must see his author from his own

point of view and subject to his own limitations, but his business, as I understand it, is to explain what the author has said, and not what he ought to have said. I am aware that two of the most interesting interpreters of Kant in this country—Edward Caird and Professor Prichard—have adopted a different policy; yet I cannot help thinking that they would have served us even better, if each of them had written two books, one to expound his own philosophy and another to expound the philosophy of Kant. The commentator must indeed tell us honestly when he finds an argument to be unintelligible or fallacious; but beyond that he need not go. Criticism, in short, should be subsidiary to exegesis.

If the critic finds the whole argument to be unintelligible or fallacious, only very special circumstances can justify him in writing a commentary at all. On the other hand, if he professes to find intelligible an argument which he manifestly does not understand, he can have no justification in any circumstances. Nevertheless he can be expected to exhibit the intelligibility of his author only within certain limits: he cannot be asked to meet all possible criticisms or to expound his author in the terms of current philosophical controversy. For my own part I believe Kant's argument to be intelligible, though I do not profess to understand all its ramifications. I have sought to expound his doctrine in his own terminology, since I am convinced it is only by becoming familiar with his terms that we can follow his argument. I am content if I can enable the reader to see the plausibility of the Critical doctrine, and so help him to assess its truth and to estimate the value of the criticisms to which it has been subjected. It is from no disrespect to such writers as Professor Prichard that I have not attempted to discuss the ultimate questions which they have raised in regard to the theory of knowledge. I am far from claiming that Kant's doctrine is the final truth

in these difficult matters, but I am sure it contains far more truth than is commonly believed, and I suspect that it contains more truth than many modern philosophies. Unless I considered Kant's doctrine to be of permanent importance, I should feel that I was wasting my time in writing about it at such length. A book of the type I have now written, if I could have read it when first I began the study of Kant, would have saved me from endless misunderstanding and much unnecessary labour; and I hope that I may have done something to make further progress more easy for my successors. Although I have confined myself to the first half of the *Kritik*, I hold, as Kant did, that this is intelligible in itself. When it is thoroughly mastered, the rest of the argument should offer no insuperable difficulty.

I will not attempt to acknowledge my obligations to previous writers on Kant. To do so would be to give a critical summary of what is called '*Kantliteratur*,' the value of which is by no means proportionate to its bulk. As in duty bound, I have made myself acquainted, in a greater or less degree, with all the English works on this subject and with most of the standard works in German. It is impossible for me to remember from whom I may have originally derived a particular interpretation, although I have made occasional acknowledgements in the body of the text. If the truth must be told, I feel compelled to say with H. J. de Vleeschauwer,¹ one of the best of modern writers on Kant, that I have found much of this literature '*inutile ou, ce qui est plus grave, trompeuse*.' In any case, as is not surprising, I have learned that Kant himself is incomparably his own best commentator; and I have sought throughout to rid myself of the theories of others and to

¹ *Le déduction transcendentale*, tome I, p. 26. It is my loss that I discovered this work only recently—it was published in 1934—and that the second volume, which will consider the actual text, is not yet to hand.

see his doctrine, so far as I may, through his own eyes. No one who understands the difficulty of this undertaking will expect, at the present stage of Kantian scholarship, to find a work free from errors, free even from serious errors. But there is one error I have never committed: I have never thought that any part of Kant's philosophy—I know nothing about his science—could justly be regarded as negligible.

For my translations I alone am responsible; but I have had before me the version of Professor Kemp Smith, and I hope that those who read Kant in English will have no difficulty in taking up my references. On very few occasions I have felt obliged to differ expressly from Mr. Kemp Smith's translations. It must not be thought from this that I fail to appreciate the services he has rendered in this field. He has given us, for the first time, an English translation which those who are unfortunately innocent of German may study with some hope of being able to follow the argument as Kant intended it. I am the more glad to acknowledge these services, because my own interpretation of the *Kritik* differs *toto coelo* from his, and because in view of the wide acceptance of his doctrines I may at times have expressed my disagreement with undue vehemence.

My references to Kant's works are, I think, self-explanatory. The first and second editions of the *Kritik* are referred to as A and B, and the original paging is given. The references in brackets are to the volume and page of the Berlin edition of Kant's works. Kant's lectures on Metaphysics (edited by Schmidt) I refer to as *Metaphysik*.

Perhaps I should offer an apology for using such a phrase as '*Kritik of Pure Reason*.' Having always disliked the word 'Critique' (whose French associations seem so alien to Kant), I yet lacked courage to revive the old English form 'Critick' and fell back upon a hybrid usage, the enormity of which I

did not grasp until too late. For this I can make no defence.

It only remains to offer thanks for the various forms of help that I have received.

My thanks are due especially to the Court of the University of Glasgow for the six months' leave granted me in 1932 in order to prosecute my work on Kant. During that period I completed the first draft of my book, and without such leave I doubt whether I should have been able to do so. My belief is that an extension of the American system of sabbatical years to the British universities would do more than anything else to increase the output of scholarly works in this country. I am particularly grateful that in this way I have been enabled to carry on the tradition of Kantian scholarship which is one of the glories of the University of Glasgow.

I must express my most grateful thanks to Mr. H. Barker (of the University of Edinburgh), and to Mr. D. R. Cousin and Miss M. J. Levett, my colleagues in the department of Logic, all of whom read the first draft of my book and offered criticisms which have saved me from many pitfalls; to Dr. Heinrich Cassirer for help in regard to the German text; to Professor J. H. Muirhead for reading the final version in typescript and for making valuable suggestions; to Miss Lilian Mattingly for typing so much of my not too legible handwriting; to my colleagues Mr. George Brown and Mr. D. R. Cousin for help in the correcting of proofs; to Miss Ursula Todd-Naylor for compiling the general index; and to Miss Elizabeth Laughland for checking some of my many references and for compiling the index of annotated passages.

H. J. PATON

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The present impression is identical with the original edition apart from a few minor corrections, mostly of misprints.

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KANT'S METAPHYSIC OF EXPERIENCE

CHAPTER I

INTRODUCTION

§ 1. *Kant and his Critics*

It is an irony of fate that Immanuel Kant, who declared the *Kritik of Pure Reason* to be intelligible only to those who understood it as a whole, should be beset by commentators who maintain that there is no whole to understand.

The contrast between the two contentions is striking. It seems hardly possible to find a middle way between them. On the one hand we have the doctrine, widely accepted to-day, that the *Kritik* is a mosaic of passages dating from different times and externally connected with one another, so that in the words of a distinguished modern commentator Kant 'flatly contradicts himself in almost every chapter'.¹ On the other hand we have Kant's indignant repudiation of such a view. 'In every writing, above all when it proceeds as a free discussion, it is possible to ferret out apparent contradictions, by comparing together isolated pages torn from their context. Such apparent contradictions cast a prejudicial light upon it in the eyes of those who depend upon criticism at second hand, but they can be easily solved by any one who has mastered the idea as a whole'.² Of this Kant was so convinced that he wrote the *Prolegomena* only in order that he might help his readers to master the idea as a whole.³ He thought that when he had done so, the difficulty of understanding him would disappear, and that those who still found him unintelligible would be well advised to employ their

¹ Kemp Smith, *Commentary*, p. xx.

² B XLIV.

³ *Prol. Vorwort* (IV 263).

talents in sciences other than metaphysics, a subject which after all it is not necessary that everybody should study.

§ 2. *The Patchwork Theory*

That the *Kritik* is a mosaic or patchwork is supposed to be obvious throughout, but to be specially obvious in the Transcendental Deduction as set forth in the first edition. This Deduction has been analysed into a large number of separate strata both by Professor Adickes and by Professor Vaihinger. It seems to cause no qualms that parts regarded as late by the former are asserted by the latter to be early, and *vice versa*.

In this matter there are naturally differences of degree. Adickes, in his edition of the *Kritik*, has propounded the theory that Kant's procedure was to insert passages into an original nucleus. This theory he has worked out in detail for the whole book. I believe his general view to be unproved, although not unreasonable, and his account of the details to be hazardous and even fanciful. Nevertheless although he is prepared to speak of the *Kritik* as a mosaic, it would be a mistake to attribute to him the patchwork theory in its extreme form. For that we must go to Vaihinger, who has dealt in full detail only with the Transcendental Deduction.¹ Vaihinger's view of the Deduction has been made familiar to English readers in the *Commentary* of Professor Kemp Smith;² and it is this view which I have in mind when I speak of the patchwork theory, although some of my criticisms apply to the view of Adickes also.

I have dealt with Vaihinger's theory more fully elsewhere,³ and can here express only a dogmatic and summary opinion.

In his argument Vaihinger ignores two fundamental facts,

¹ *Die Transcendentale Deduktion der Kategorien* (Niemeyer, Halle, 1902).

² Professor Kemp Smith generally follows the divisions of Adickes elsewhere, and it is difficult to reconcile this attitude with his complete abandonment of Adickes in favour of Vaihinger, when he deals with the Transcendental Deduction.

³ *Proceedings of the Aristotelian Society*, Vol. XXX, vii (1930).

both clearly stated by Kant, (1) that the Deduction has two sides, an objective and a subjective, and (2) that it contains two expositions, a provisional and a systematic. He then chooses one test, and one only,¹ which is, roughly, the account given of imagination; and by means of this test he goes over the Deduction as with a comb. Since imagination is to be found only on the subjective side of the Deduction, one expects first of all that this method will divide up the Deduction into a subjective and an objective deduction. This is what actually happens. One expects also to find two objective deductions (a provisional and a systematic), and two subjective deductions (a provisional and a systematic)—four in all. We do get a provisional and a systematic subjective deduction; but owing to the fact that in the systematic exposition the subjective and objective sides are closely combined, the whole of the systematic exposition is regarded by Vaihinger as one stratum. In the provisional exposition, on the other hand, points which should be conjoined are dealt with in separation (a fact to which Kant himself draws attention), and this enables Vaihinger to extract from it two objective deductions, so that our expectations are not wholly disappointed. Having decided that the subjective deduction is late and the objective deduction early, he concludes that the provisional subjective deduction is very late, and one of the provisional objective deductions very early. Thus he gets four strata, and the ingenuousness of his method is concealed from himself and his readers by the fact that he can, not unnaturally, find elsewhere preparatory passages which will fit in with this classification. With amazing self-confidence he proceeds to divide up these main strata into substrata, which he affects to put in a temporal order regarded as at least probable. Finally he examines, on the same principles, some of Kant's loose jottings (at that time almost entirely undated), and succeeds, as is only to be expected, in discovering passages

¹ '*das einzige und entscheidende Unterscheidungsprinzip.*' This admission itself seems to me enough to put the whole theory out of court.

which he can fit into his four strata. This he regards as a confirmation of his argument.

To my mind the whole discussion is a monument of wasted ingenuity, rendered the more pathetic by the learning and clarity of the exposition.

§ 3. *Extreme and Moderate Views*

No one need deny that Kant's mind, like that of other philosophers, worked on different levels; that he thought out some problems more fully than others; and that he was capable of solving one problem without at first realising all its implications in relation to other problems. Nor need one deny that the notes which he had by him as he brought the *Kritik* into its final form were on different levels of reflexion, and may have influenced the *Kritik* as we have it to-day. I think myself that the inequalities in Kant's thought have been grotesquely exaggerated, and I see no reason to suppose that he ever made use of any notes without that re-writing which is mentioned in the account of his method given by Borowski.¹ I do not wish, however, to argue either of these points, and I recognise that here there may well be differences of opinion. What I wish to protest against is the doctrine that Kant took isolated and contradictory notes, dating from different periods, and joined them together in a purely external manner. If there are any who think that this description exaggerates the doctrine of Vaihinger, I can only ask them to re-read what he has written in his monograph on the Transcendental Deduction.²

I venture to hold both that the general theory of Vaihinger is incredible and that its detailed application is demonstrably false. The finding of contradictions in Kant had become with him almost an obsession.³ This is seen to some extent even in his *Commentary*, which derives its immense value

¹ (IV 579).

² See especially pp. 2 (= 24) and 24 (= 46).

³ Compare Adickes, *Kant und die Als-ob-Philosophie*, p. 62. 'Vaihinger practises the cult of contradiction in a way which works to death a principle in itself justifiable. He creates contradictions without reason.'

from his erudition and power of analysis rather than from his capacity to enter into another man's mind.¹ When he passes to the more subtle task of literary criticism, to the consideration of Kant's method of composition, his weakness shows itself in the crudest possible form.

It is not my experience of the human mind that inconsistencies of thought and expression are always, or even generally, due to differences in the date of writing. Nevertheless this is a possible explanation, and it may be held in a reasonable form, especially when we are considering a work of great length like the *Kritik*. What so many people fail to realise is the immense gap between holding such a general theory and attempting to determine on this basis the order in which the work was composed. Where the general theory is propounded in a more or less reasonable way, as it is by Adickes, there is plenty of room for extravagance in the working out of the details. Even Vaihinger is able to recognise that Adickes' account of the Transcendental Deduction is 'highly artificial', 'like a system of cycles and epicycles'; and I am content to repeat his criticism.² It is sufficient to say that Adickes distinguishes seven different deductions, in almost every one of which he finds interpolations from the others, and these interpolations have themselves further interpolations as well as 'harmonising passages' intended to give an appearance of unity to the whole. In detail, as well as in principle, Adickes' account seems to me less unreasonable than that of Vaihinger; but I can only stand amazed at his audacity in the application of a method which depends entirely on internal evidence and is by its very nature dubious and uncertain.

It must be remembered that the burden of proof lies not upon those who treat the *Kritik* as the unitary work which it professes to be, but upon those who claim to distinguish the different strata of which it is composed. If I attempted

¹ Adickes takes the same view (op. cit., p. 57), and even applies to Vaihinger the lines

'Denn hat er die Teile in seiner Hand,
Fehlt, leider! nur das geistige Band'.

² See *Die Transcendentale Deduktion*, p. 4 (= 26).

to refute in detail the complicated and conflicting theories of Vaihinger and Adickes, I should only distract attention from the doctrines of Kant, which it is my purpose to expound. It will be a sufficient refutation of the patchwork theory in its extreme form, if it can be shown that the *Kritik*, and especially the Transcendental Deduction, is an argument—not necessarily a valid argument, and certainly not a clear argument, but one which might be set forth by an able thinker breaking new and difficult ground. That, to the best of my ability, is what I hope to do.

§ 4. *Consequences of the Patchwork Theory*

This question cannot be regarded as a biographical problem of no importance, since it has serious consequences both for teaching and for exposition.

The youthful mind is too intelligent to suppose that a work composed in this casual way is worth the immense labour which is necessary to understand it; and it will not be deceived for long by the encomia pronounced on the advantages of combining so many contradictory doctrines within the compass of a single work. If the patchwork theory is true, the study of the *Kritik* ought to be removed from the philosophical curricula of the universities.

For exposition the consequences seem to me even more serious. It is not merely that the theory, so far from shedding light on the obscurities of Kant, shrouds them in impenetrable gloom. To my mind it makes further criticism impossible.

The essence of criticism, and the only way in which we can penetrate more deeply into the mind of an author, is to check our interpretation of one passage in the light of another, until gradually the whole becomes clear.¹ If our interpretation is contradicted by other passages, we are compelled to reconsider it, and so we may come nearer the truth. On the patchwork theory there is no such compulsion,

¹ Adickes (*Kant und die Als-ob-Philosophie*, pp. 10 ff.) has some wise words on this subject.

and the way is open for purely subjective impressions.¹ Indeed if an interpretation is contradicted by what Kant says elsewhere, the commentator merely notes a further confirmation of the patchwork theory; and the number of contradictions which he can find is limited only by his capacity for misunderstanding Kant.

Another unfortunate, but inevitable, consequence of the theory is the atmosphere of condescension with which the name of Kant is now surrounded. This is most conspicuous, not in Kant's professed opponents, but in those who claim to set forth the meaning and worth of the Critical Philosophy. Well might Kant apply to himself the expression he puts into the mouth of Leibniz: 'I can defend myself against my enemies, but God save me from my friends.'²

§ 5. *Kant's Own View of the Kritik*

The patchwork theory is an attempt—although, in my opinion, a mistaken attempt—to solve a real problem, the problem of the *Kritik's* difficulty and obscurity. This has been a continuous subject of complaint from the time of publication until now.

On this matter the opinion of Kant himself is at least worthy of being examined. He fears that his attempt to solve the problem of Hume will meet with the same fate which—in spite of the subtlety and attractiveness of Hume's style—greeted the original statement of it. It will be wrongly criticised, because it is misunderstood; and it will be misunderstood because, though people may be prepared to read the pages through, they will not take the trouble to think the thought through. And the reason why they will not take this trouble

¹ Kemp Smith, for example, habitually distinguishes what he calls 'the true Critical teaching' from the doctrines propounded by Kant. Even the fact that the doctrine of pure intuition is consistently held by Kant and regarded by him 'as an integral part of his system does not, *of course*, suffice to render it genuinely Critical' (see *Commentary*, p. 40—the italics are mine).

² *Streitschrift*, 2. Abschn. (VIII 247).

in the case of the *Kritik* is that the work is dry, obscure, diffuse, and contrary to all accepted ideas.¹

For its dryness Kant does not think he need apologise, at any rate to philosophers. He does not claim to possess the stylistic gifts of a Hume or a Mendelssohn, but he believes that he could have made the *Kritik* a more popular work had he been willing to sacrifice thoroughness to popularity. The necessity for thoroughness is imposed upon him—be it noted—by the necessarily organic character of a *Kritik of Pure Reason*, such that every part depends upon the adequate treatment of every other part. The difficulties which many found even in the *Prolegomena* made him less confident of his capacity for lucid exposition,² but there is no doubt that the dryness of his style was a matter of deliberate choice, as he explains in the first edition.³ He preferred the scholastic to the popular style, because if he had enriched his argument with illustrations and examples, its length—and it is long enough in any case—would have made it difficult for the reader to grasp the argument as a whole. His choice is made in the interests of science,⁴ and it is of fundamental importance that he should not seem to persuade the reader by rhetoric instead of convincing him by argument.⁵ This is a subject upon which he has long reflected, and he is certainly not inventing excuses to explain an unexpected failure.⁶

The diffuseness⁷ of the work he seems to regard partly as a weakness of his own, but mainly as imposed upon him by the nature of his subject, by the necessity of entering into many details if the exposition is to be an organic whole. So far as it belongs to the nature of the subject, he regards it as an actual advantage to his argument, although a disadvantage

¹ *Prolog. Vorw.* (IV 261).

² B XLIII.

³ A XVII ff. Schopenhauer, a good judge, called it a '*glänzende Trockenheit*'.

⁴ *Prolog. Vorw.* (IV 262).

⁵ *Nachlass* 5031 (XVIII 67).

⁶ Compare letter to Herz (X 230) and *Log. Einl.* VIII (IX 62).

⁷ The word '*Weitläufigkeit*' seems to imply primarily extensiveness and intricacy; the suggestion of verbosity is secondary, and may not be implied by Kant at all. Compare A 98.

to his book. He admits, however, that it is a source of obscurity, since the reader finds it difficult to grasp the main points in the argument, and so to get a comprehensive idea of the whole.

On this matter Kant is precisely right, and the difficulty is at least partly due, as he suggests, to his method of exposition. Especially to the beginner, the *Kritik* appears as an endless string of equally difficult, and for all he knows equally important, sentences; so that the main turning points of the argument, and the crucial sentences which demand special scrutiny, are lost to him. With more attention to the method of exposition this could have been avoided.

To more fundamental complaints of obscurity Kant is not sympathetic. He even says, somewhat unkindly, that complaints of obscurity are often merely a covering for the laziness or incompetence of the critic; and he hopes that his obscurity may help to prevent the ignorant from talking confidently about problems in metaphysics, as they would never dare to do in other sciences.¹ He is prepared to admit, however, that the many misunderstandings into which even acute thinkers have fallen are 'not perhaps without his fault';² yet the deficiencies which he admits belong only to the method of exposition, and not at all to the system or the arguments he has expounded.

To what does Kant ascribe these defects of exposition? To the fact that although the *Kritik* was the product of twelve years' reflexion, it was composed³—I use the word in a neutral sense—hurriedly in four or five months, with the greatest attention to the content, but with little care for the method of exposition.⁴ The statement that it was composed in four or five months does not necessarily imply that it was entirely re-written, although a parallel statement⁵ that it 'was brought to paper in its present form in only a short time' distinctly

¹ *Prol. Vorw.* (IV 264). ² B XXXVII. ³ 'zu stande gebracht.'

⁴ Letter to Mendelssohn (X 323). Compare letter to Garve (X 316) and letter to Biester (X 255). These are all cited in (IV 585), and two of the passages are translated by Kemp Smith, *Commentary*, p. xix.

⁵ (X 255).

of reality, and in such a vision there must always be difficulty for those to whom it is imparted, and an element of struggle and effort even for the seer himself.¹

§ 7. *Novelty and Obscurity*

Philosophy is a study to which many different types of mind contribute, and all of these may have their own value. The gift of clarity—a great gift—may belong to many of these types of mind; but I do not think it will be maintained that the clearest minds are always the most profound or the most far-seeing. Clarity may be found even in those thinkers, despised by Kant, whose philosophy is the history of philosophy. It is to be found still more often in what may be called analysts,² acute expositors, and often destructive critics, of the works of other men. In more positive and original thinkers it is to be found in those whose work is confined within a narrow sphere, or in those who, accepting certain premises, work out their consequences, as Berkeley and Hume worked out the consequences of the premises laid down by Locke. Perhaps it is to be found at its best in those creative thinkers who adopt a semi-mathematical method and, having laid down a number of self-evident principles, attempt to build upon them the fabric of truth, laying, as it were, one brick upon another, after the most scrupulous attention both to the thought and to its expression. Such methods, however, from their very nature are incapable of covering adequately the whole field of human thought; and I doubt whether this kind of clarity is to be found in the philosophers who advance, or revolutionise, thinking in every department of philosophy.

We have among us all these types of mind at the present time. There is, I think, a general insistence upon the need for clarity, and a reaction against what seem to us to be the too facile solutions, and too hurriedly comprehensive systems,

¹ Compare B XLIV, where Kant speaks of obscurities in the *Kritik*, which at the beginning are hardly to be avoided. This may, however, refer only to readers, and especially to readers who have not yet been able to study the whole system of the Critical Philosophy.

² This is how Kant describes Baumgarten (B 35 n.).

of the past generation. Yet while we have many clear writers, the thinkers who make the most serious attempts to gather together the different strands of human knowledge, and to work out their consequences in all branches of philosophy, are precisely the thinkers who are most commonly charged with obscurity. Professor Whitehead, for example, finds it necessary to invent a new vocabulary for the expression of his thought; and he is rebuked by his former followers for falling into contradictions and for giving up the clear distinctions which he found sufficient at an earlier stage of his reflexions. Professor Alexander is content in the main to use the accepted vocabulary of philosophy, but even his charming and persuasive style does not prevent his doctrine from seeming, to many of us, both difficult and obscure.

This phenomenon—which is to be found equally in music and in art—ought not to surprise us, when we find it in philosophy. When a man explores unknown countries, we do not blame him on his return because his maps are inferior to the ordnance survey of England. We have to remember that whatever Kant is doing he is certainly exploring new paths. We must expect that the account of his explorations will be strange to untravelled minds, and even that it may contain gaps and deficiencies which a longer residence in those parts might remedy. It is unreasonable to demand that a new philosophy should come before us, armed at all points, like a mathematical treatise.¹

§ 8. *The Reasons for Kant's Obscurity*

The obscurity to be found in Kant has been greatly exaggerated. As a writer he is very much clearer than most of his critics; and many of the alleged contradictions exist only in their imagination, and are due to misunderstandings for which Kant is not to be held responsible.² What obscurity

¹ B XLIV. Cassirer, *Kant's Leben und Lehre*, Chapter III (Berlin 1923), has an admirable discussion of the whole subject.

² It is astonishing, for example, how his clear statement about the Copernican revolution has been misunderstood. See BXVI; BXXII n.; Kemp Smith, *Commentary*, pp. 22 ff.; and compare Chapter III § 1.

there is, is to be found chiefly in the passages—such as the Transcendental Deduction and the Analogies—where Kant is breaking with tradition and trying to establish his revolutionary views. We need no far-fetched explanation of this. Kant's obscurity where genuine, is sufficiently explained by two facts, firstly that the *Kritik* was composed in a hurry, and secondly that the problems investigated were as difficult as they were novel.¹

§ 9. *Kant's Use of Language*

The more serious source of obscurity, the novelty and difficulty of his theme, I need not discuss further; but something must be said about the effects of haste upon his use of language.

We know that Kant took little trouble in regard to proof-reading, and apparently he did not even see some of the proofs of the first edition.² Corrections noted by him in the first edition he fails to insert in the second edition. When he does make corrections in the text of the second edition, he fails to carry them out consistently.³ If one remembers the difficulty of the subject, one must believe that some obscurities are probably due to the printer. Others may be due to the fact that Kant made changes in his manuscript and failed to see to it that the necessary readjustments were completed.

A more fruitful source of obscurity is carelessness in the use of language. The *Kritik* proceeds as a free discourse,⁴ a dialogue of the soul with itself, and if we expect that the same word is always to be used in precisely the same sense, we shall certainly be disappointed.

Thus, for example, the word 'object' is used by Kant in at least four senses. It is used for the thing as it is in itself,

¹ It is possible that some of Kant's obscurity is due to the fact that he is in error, but that hypothesis must be the conclusion of an argument—not a principle of exegesis. ² A XXI-XXII.

³ See, for example, B 25 = A 11-12; B 29-30 = A 15-16.

⁴ B XLIV. It may be observed that in hurried writing of this type we expect to find repetitions—the great stumbling-block to some of the commentators.

and for the thing as it appears to us; or, in more technical language, it is used for the thing-in-itself and for the phenomenal object.¹ Furthermore the phenomenal object is itself composed of a matter given to sense and a form imposed by thought; and each of these is called by Kant the object, the former the indeterminate object, or the object as appearance, the latter the object in general. Hence he is capable of saying that the object is not known, and that the object must be known; and again that the object is given to us apart from thought, and that there is no object apart from thought.

To a microscopic critic guided only by the letter of the text these contradictions are insoluble. Yet it is obvious that such verbal contradictions may take place without any confusion in the mind of the writer. He expects us to judge from the context which particular sense of 'object' is meant, even although at times it may not be possible for us to do so with certainty.

I do not defend these carelessnesses of expression, nor do I maintain that the contradictions are always merely verbal; but I do assert that, with the exercise of a little intelligence and good will, many of the alleged contradictions will disappear.

There is another point which must always be remembered. Kant held that in philosophy definitions should come at the end, rather than at the beginning.² Some philosophers deny this, but even they ought to recognise that Kant has chosen to express his thought in a way different from theirs. He is not stating the results of his thought, or building up a system upon certain definitions. He is rather thinking aloud, and asking us to share in the conversation. To change the metaphor—we must do our best to follow him up the steep and thorny way of the *Kritik*,³ and then consider whether we can see the wide prospect which he claims to see. If we insist on each step being justified before we take the next, we shall never see anything.

¹ See B XVIII-XIX n., where Kant argues that these are the same object considered from different points of view.

² A 731 = B 759.

³ B XLIII.

§ 10. *Some Reservations*

The general position for which I stand is that such obscurities and contradictions as there are in the *Kritik* can be explained without any reference to the patchwork theory. I do so, however, subject to certain reservations.

In the first place I am speaking only of the Aesthetic and Analytic, though I have no reason to believe that I should take a different view of the Dialectic.

In the second place, quite apart from the patchwork theory, there is a wide consensus of opinion that the Aesthetic was written at an earlier period than the Analytic, or at any rate expresses an earlier level of thought inconsistent with that of the Analytic.

Such a hypothesis seems to me a tenable hypothesis, and in face of the immense authority behind it, I hesitate to reject it. Kant certainly speaks, throughout the Aesthetic, as if the object could be given to sense by itself, and he says nothing of the activity of thought which, in the Analytic, he insists is necessary for knowledge of an object in the full sense. The reason for this may conceivably be that he is too shortsighted to see what is coming, or that he used an earlier doctrine¹ without realising its full inconsistency with the central doctrine of the *Kritik*. I cannot, however, conceal my own belief, unpopular at the moment though it be, that this seeming inconsistency in Kant is due to the fact that he is too long-sighted, and expects his readers to be longsighted also. At the very outset he says that in the Aesthetic he proposes to isolate sensibility, and to take away from it everything that the understanding thinks.² And what he says he will do, that he does. There is hardly a breath of the work of understanding in the Aesthetic; and Kant, I believe, expects his readers to remember, through a long and complicated argument, that everything is in a sense provisional and is to be

¹ The doctrine of the *Dissertation*. One point against this view is that there are marked differences between the Aesthetic and the *Dissertation*.

² A 22 = B 36. Compare A 62 = B 87 and A 305 = B 362.

reinterpreted in the light of what comes later. I think that a hint or two to that effect would have been a help, and that he ought not to have reserved its clear statement for a footnote to the *Analytic* in the second edition.¹

There is one other passage which as a whole I am prepared to consider as possibly written at an earlier date, and as expressing an earlier level of thought. That passage is what I have called the provisional exposition of the *Transcendental Deduction*.² Its doctrine of imagination is undoubtedly inconsistent with the doctrine expressed elsewhere. If it is taken as early,³ we have an intelligible evolution of Kant's thought from a less satisfactory to a more satisfactory view, and it is understandable that Kant should retain the earlier version as showing the road by which he had travelled. This, however, I regard as an uncertain hypothesis. All we can be said to know is that Kant considered the passage a suitable preparation for his systematic exposition.⁴

An admission of the kind I have made gives us no warrant for supposing that Kant was capable of overlooking flagrant contradictions in different expositions of his theory. In this case he need not be unaware of the contradictions. His awareness of the contradictions may be the reason why he warns the reader that the whole passage is to prepare rather than to instruct him.

Subject to these reservations, I see no reason to regard the *Kritik* as other than a unitary work. In so saying I do not mean to express any opinion as to the method of its composition; for on this subject we have no adequate evidence. Still less do I mean to deny the presence in it of repetitions, obscurities, inequalities, and inconsistencies. I mean that the only hope of understanding the *Kritik* lies in treating it as

¹ B 160-1 n.

² A 98-114. Adickes shows more understanding of this than Vaihinger.

³ Vaihinger takes the first part of it as late. I would add that the researches of de Vleeschauwer (*La déduction transcendentale*) have shown conclusively that this part cannot be very early. ⁴ A 98.

a whole and trying to fit its different parts together.¹ I believe that this method of treatment is not made impossible by such inconsistencies as are to be found in Kant; and I am quite sure that beginners in Kant ought to be given some view, even if partly mistaken, of the doctrine as a whole before being plunged into modern expositions of its alleged unending contradictions.

§ 11. *Kant's Claim*

As will be obvious from this discussion, Kant himself was fully convinced that his *Kritik* is a unitary work. Indeed for him it is so much a unitary work that to change even the smallest part of it would give rise to contradictions, not merely in the system, but in human reason itself!² This statement, it must be remembered, he makes after having had the advantage of hearing what the critics had to say about it.

I shall be told, no doubt, that a man is not always the best judge of his own work. The commentators are wont to quote Kant's own dictum about Plato, that it is often possible to understand an author better than he understands himself.³ Whether even Kant really understood Plato better than Plato understood himself is a matter on which there may be two opinions; but even if he did, that does not justify us in supposing that lesser men can understand Kant better than he did himself. I have no desire to suggest that Kant was a demi-god incapable of error, but I think that he knew very well what he was about.

Another thing I shall expect to be told is that Kant's insistence on the unity of his work is merely another example of his devotion to 'architectonic', an artificial and external plan imposed upon his exposition because of a desire to make it conform to the divisions of Formal Logic. This assertion seems to me at the best to be only a half-truth. I do not deny

¹ I believe also that Kant is in the main right in saying that the changes made in the second edition concern the method of exposition rather than the substance of the doctrine. See B XXXVII ff.

² B XXXVIII.

³ A 314 = B 370.

that the Formal Logic on which Kant based so much of his argument has been superseded; nor do I deny that he ought to have seen the necessity for reconsidering his presuppositions. Nevertheless there is no part of Kant's doctrine which has, in my opinion, been more grossly misunderstood than his theory of Formal Logic and its relation to Transcendental Logic. If we can remove some of these misunderstandings, and above all if we can place Kant in his historical setting, I believe that much which has been ascribed to an irrational pedantry and a muddleheaded love of architectonic will be seen in a very different light. I believe also that a proper understanding even of Kant's errors will enable us to grasp more clearly the unity of his thought.

§ 12. *Kant as a Thinker*

There is much in Kant, much even in the first half of the *Kritik*, which is still to me personally dark and difficult. Nevertheless many passages which at one time were obscure to me have, with further study, become clear; and I think that I have discovered the meaning of some arguments which have been widely misunderstood. This has encouraged me to believe that other difficulties are in principle soluble, and I am convinced that the prevailing view of Kant in this country fails to do justice to him. The confused and pedantic thinker portrayed by some commentators seems hardly the sort of person to set all Germany in a philosophical ferment and to initiate a series of movements whose repercussions in other countries are far from having ceased even at the present time. It is possible to look upon all these movements as misguided, and I suppose this is what Mr. Bertrand Russell means by calling Kant 'a misfortune': yet to say this is not to deny Kant some elements of greatness; for to be a misfortune in modern philosophy must require considerable gifts, even if they are of a non-philosophical kind. If we regard Kant—to put it at its lowest—as the Mrs. Eddy of philosophy, the nature of his influence would still require to be explained; and its source is not to be found merely in his moral fervour,

CHAPTER II

APPEARANCE AND REALITY

§ 1. *Primary and Secondary Qualities*

According to Kant, the world which we know fills space, and lasts through time, and is composed of permanent substances acting upon one another in accordance with the law of cause and effect. This world is common to all human beings and is explored by science: yet it is a world, not of things as they are in themselves, but only of things as they appear to us; or, in Kant's language, a world of phenomena or appearances.

By this Kant does not mean that things as they appear to us exist only at the moment when they are perceived, or that everything is what it appears to be at the moment. He distinguishes—as we all must—between the time-order of our sensations and the time-order of objective events: the back and the front of a house, for example, exist at the same time, although I can never see them at the same time. There is an objective world¹ which we seek to know, and which must be distinguished from the subjective series of sensations and thoughts by which we seek to know it.

For common sense this objective world is composed of things-in-themselves; that is, of things which are what they are independently of our sensations and our thoughts, and indeed independently of the constitution of the human mind. When we do not fall into error, we know things as they really are, and as they still would be, if there were no minds to know them. A billiard ball is red and hard and smooth and spherical. All these characteristics it possesses in itself, and we do not make them or contribute to them: we merely discover them.

¹ This world is called 'objective', since it is an object common to all men; whereas my sensations or thoughts are 'subjective'—they belong to me and to nobody else. This distinction is provisional and requires further analysis. There is a sense in which even my sensations and thoughts form part of the one phenomenal world, and they can be known, though not directly intuited, by other people.

This common-sense view is difficult to uphold on reflexion; and it has long been a wide-spread belief among philosophers and scientists that the billiard ball possesses in itself only the primary qualities (size, shape, motion etc.). The secondary qualities, such as colour and sound, are supposed to result when the sense-organs of living bodies are affected by the primary qualities, particularly by motion. On this view the world of things as they are in themselves is characterised only by the primary qualities:¹ the secondary qualities are mere appearance.

This doctrine has been forced upon men's minds by the success of the sciences, and especially of physics, during the last three centuries. Kant accepts it,² so far as he holds that the primary qualities are the same for all men, while secondary qualities may be different for different men. At times he speaks as if the secondary qualities were purely subjective, and could in no sense be attributed to objects. At other times he recognises that the colour and the scent of the rose can be attributed to the object *in relation to our senses*.³ He affirms on the other hand, not only that primary qualities are objective, but even that physics, from its own point of view, is justified in treating the rainbow as a mere appearance and in regarding the physical drops of rain (with their primary qualities) as things-in-themselves.⁴

His own Critical doctrine, however, is that we must distinguish, not two things, but three: (1) *the secondary qualities*, which depend on our individual sense-organs and on our position in space; (2) *the primary qualities*, which are objective and common to all men, but which nevertheless depend on the constitution of the human mind, although not on our indivi-

¹ The primary qualities are not the *apparent* size, shape, and motion (which vary with our different sense-organs and our different positions in space); they are determinable by scientific measurement and are the same for all men. Compare Plato's reference to 'counting and weighing and measuring' in *Republic*, 602d.

² A 28-9; B 44; A 29-30 = B 45; A 36 = B 53; A 45-6 = B 62-3; B 69-70; *Proleg.* § 13 *Anmerk.* II (IV 289).

³ B 69-70.

⁴ A 45-6 = B 62-3.

dual sense-organs or our position in space; (3) *the thing-in-itself*, which is what it is independently of the human mind, but which, for reasons to be considered later, cannot be known by us.

On this view secondary and primary qualities, taken together, are opposed to things-in-themselves as appearance to reality. The distinction between secondary and primary qualities is a distinction within appearance, not a distinction between appearance and reality. The secondary qualities are (relatively) private and subjective, the primary qualities are common and objective, appearances; but they are neither of them realities independent of the mind which knows them. Nevertheless the primary qualities do not, like the secondary, exist merely when they are perceived: they are permanent characteristics of the objects of experience.¹

§ 2. *Relation of Appearances to Reality*

What is the relation between things-in-themselves and appearances? Kant never questions the reality of things-in-themselves, and never doubts that appearances are appearances of things-in-themselves.² The appearance is the thing as it appears to us, or as it is in relation to us, though it is not the thing as it is in itself. That is to say, things as they are in themselves are the very same things that appear to us, although they appear to us, and because of our powers of knowing must appear to us, as different from what they are in themselves. Strictly speaking, there are not two things, but only one thing considered in two different ways: the thing as it is in itself and as it appears to us.³

¹ The whole doctrine of substance is meaningless unless this is true. For Kant the actual or existent is not what is immediately present to sensation, but what is connected with sensation in accordance with the Analogies. See A 225-6 = B 272-3 and compare Chapter XLIX § 1.

² Compare *Prol.* § 13 *Anmerk.* III (IV 293). I believe with Adickes that the section on Phenomena and Noumena implies no qualification of this assertion, though it has often been supposed to do so. See Adickes, *Kant und das Ding an sich*, pp. 95 ff., and compare Chapter LVI. ³ Compare B XVIII-XIX n.; B XXVI; and B XXVII.

This view seems to be Kant's primary view, but he also speaks, less happily, of appearances as being due to the 'influence' of things in themselves; and he speaks of things-in-themselves as 'affecting us' or 'affecting our sensibility', and so producing appearances or ideas. This usage is natural and difficult to avoid, but it may be misleading. We must remember that the relation of an appearance to the reality which appears is more intimate than the relation of effect to cause, and involves no such temporal succession as is involved in the causal relation. It would be truer to say that the thing-in-itself is the condition, than that it is the cause, of the appearance.¹

It is not, however, the only condition. The other condition which determines the character of appearances is the mind. The appearance is indeed given to us in sensation, which is passive, but this does not mean that the thing-in-itself, or some part of it, migrates unchanged into our mind;² it does not mean—if we prefer to avoid metaphor—that the thing-in-itself, or some part of it, appears to us just as it is in itself. Our sensibility is such that things must appear to us as spatial and temporal, whatever be the character which they possess in themselves. Space and time are due to our human sensibility, or in Kant's language are forms of our sensibility, and not characteristics of things-in-themselves. Furthermore, if we are to be aware not merely of a succession of *sensa*, but of a physical world of substances in interaction, the mind must be active in thinking, and must contribute to the manifold of sense the categories—such as substance, or cause and effect—which belong to mind in its nature as understanding. The character of the human mind (with its human sensibility and understanding) determines (along with things-in-themselves) our common objective world. It determines in short how things-in-themselves must appear to us. For this reason the world we know is a world of appearance, a world of things as they appear,

¹ Even this is not so true as to say that the thing-in-itself is the reality which appears, and that this reality is for us unknown and unknowable.

² *Prolegomena* § 9 (IV 282).

and must appear, to human minds, but not a world of these things as they are in themselves.

The world we know is, however, not an appearance to momentary sense, but an appearance to sense and thought, or to sense and understanding. Just because the mind is not mere sense, but is active in thinking, it is able to transcend the momentary sensation, and to be aware of a world of permanent substances in interaction. But the world of which it is aware—even in scientific knowledge—is a world transformed by the necessary conditions and limitations of finite human experience.

§ 3. *Mental States*

Kant's primary concern is with the physical world studied by natural science, but he extends his principles also to the mental world which is studied by psychology. He supposes that just as we have an outer sense which enables us to know a world of bodies in space, so we have an inner sense which enables us to know the world of our own mental states. But what we know by inner sense, and study in psychology, is also phenomenal: we know our own mind, not as it is in itself, but only as it appears to us under the special conditions which determine human knowledge. We know it, for example, as a succession of mental states in time; but this is due to the fact that time is the form of our inner sense. Human sensibility is such that it imposes temporal relations on what is given to inner sense; and apart from this condition of human sensibility, intuition might apprehend my inner states without any reference to time or to change.¹

The complications to which this view gives rise are obviously great, and it is to be remembered—although Kant appears to waver on this point—that our mental states and physical bodies are all part of one phenomenal world, and are all alike subject to the laws of cause and effect. It is part of Kant's

¹ A 37 = B 54. Kant's own statement is not confined to changes of inner states, but it is these which he has specially in view.

theory that within this phenomenal world the impact of light upon the human eye can be the cause of a sensation of colour.¹ Yet the ray of light and the human eye and the sensation of colour are all appearances of unknown things-in-themselves; and, as we have seen, Kant's language in many places suggests that things-in-themselves are the causes of these appearances. This looks like a double causality similar to the double causality which Kant finds in human action (such that the will in itself may be free, although the visible actions which constitute its appearances in the phenomenal world are all determined by the law of cause and effect).² The phenomenal cause of sensations is to be sought in the movements of physical bodies which are themselves phenomenal, but the ultimate cause (or, better, condition) is the thing-in-itself.

If the self which is known in inner sense is only phenomenal, what are we to say of the self which knows? Is the knowing self a thing-in-itself, although the known self is only an appearance? To this question Kant's answer is obscure; but perhaps we may say, in the light of his moral philosophy, that the self does belong to the realm of things-in-themselves, although as a thing-in-itself it can never be known by us.³

On this view the phenomenal world which we know is the joint product of the knowing mind and things-in-themselves. We can analyse it into different elements which have a different origin. What Kant calls the manifold of sense is contributed by things-in-themselves, but the space and time in which the manifold is arranged, and the categories under which the manifold is thought, are the contribution of the human mind.

§ 4. *Difficulties*

The distinction between a phenomenal world which we know and a world of things-in-themselves which we do not know is fundamental to Kant's metaphysics. It enables him both to explain our *a priori* knowledge of the phenomenal world,

¹ Compare A 28 and A 213 = B 260.

² See B XXVII-XXVIII.

³ Compare B XXVIII.

and also to justify our belief in God and in human freedom. Unless we adopt this distinction as a provisional hypothesis, we cannot hope to have other than an external view of his philosophy. The understanding of Kant has been hampered in this country by the fact that when he began to be studied here, the idealist philosophy of Germany had discarded the unknown thing-in-itself. Hence the English neo-Kantians were apt to underestimate or ignore this side of his philosophy, and to interpret (or misinterpret) Kant in terms of Hegel.

The difficulties of the Kantian hypothesis are indeed obvious. If we cannot apply our human categories to things-in-themselves, how can we speak of things-in-themselves in the plural? Is not number for Kant bound up with the category of quantity, and meaningless apart from space and time? How can we say that our sensations are due to the influence of things-in-themselves? Is not 'influence' simply a word for a special case of the category of cause? More generally, can we accept an admittedly unknown reality as an essential part of any intelligible explanation of the world? Above all, can we believe—if this is Kant's doctrine—that the world as we experience it is due to the interplay of two unknown things-in-themselves, one of which is a self, while the other is perhaps not a self?¹ It is difficult to accept one wholly unknown factor. It is almost impossible to accept two. If they are wholly unknown, how can they be distinguished from one another?²

Kant holds that we can *think* things-in-themselves, although we cannot *know* them,³ and in this way he may perhaps hope to avoid some of these difficulties. But such a view introduces new difficulties of its own. According to him it is possible for us to think, that is to entertain a concept, without being able to show that there is, or even can be, an object corresponding to such a concept. If we are to know an object, and not merely

¹ Kant is willing to suppose that this also may be a self, or at any rate a monad; but he regards such a supposition as mere speculation.

² In A 358 Kant himself suggests the possibility that there may not be two things, but only one.

³ See B XVIII and B XVIII-XIX n.; also B XXVI ff.

to think it, we must be able to show at least the possibility of an object corresponding to our thought. A thought or concept is possible, that is, *logically* possible, if it is not self-contradictory. It does not follow from this that its object is possible. The *real* possibility of the object must be shown in other ways. We may, for example, be able to think or conceive freedom without any logical contradiction, and yet be unable to show that freedom itself is really possible. In such a case we are said to think freedom, but not to know it.¹ We can also think or conceive a figure bounded by two straight lines, for this involves no logical contradiction. But we cannot know such a figure, because it is incompatible with the nature of space, which is a condition of our experiencing objects.²

The difficulties of such a distinction do not concern us here, but only its application to the thing-in-itself. Since the thing-in-itself is *ex hypothesi* real, it would seem to be *ex hypothesi* possible; and if we can think it, and think it truly, how is such thought to be distinguished from knowledge?

Kant's answer is that such thought is empty. It is merely the thought of an unknown something which is neither real nor possible in the same sense as objects of experience are real or possible.³ We can think only by means of human categories, but these categories (including the category of actuality or existence) are empty apart from a manifold given to sense under the forms of space and time: in abstraction from sense they cannot give us knowledge.

This answer gives rise to fresh difficulties. The categories on this view cannot, strictly speaking, apply to things-in-themselves,⁴ even although we are unable to speak or think of

¹ See B XXVIII.

² See A 220-1 = B 268. Other examples will be found on the same page and those that follow.

³ For this sense, see the Postulates of Empirical Thought and compare Chapters XLIX and L.

⁴ Adickes (*Kant und das Ding an sich*, p. 57) maintains that Kant uses the word 'category' in two senses, (1) as synthetic functions of our transcendental unity of apperception, and (2) as the most universal qualities, connexions, and relations of things which are created or posited by these functions; and that categories in the second

things-in-themselves without making use of the categories. Such use seems to be mythological and devoid of intelligible meaning. What meaning it has for us is due to the assumption of some sort of analogy¹ between things-in-themselves and objects of experience; and this assumption is illegitimate, if we take it as a basis for genuine knowledge.²

§ 5. *Historical Background*

Kant's doctrine—like any doctrine which speaks of the unknown and unknowable—has the appearance of paradox, or even of self-contradiction, and it is the more necessary to understand the grounds which lead men to hold views of this type.

The doctrine is partly due to the history of philosophy during the eighteenth century. Of the two schools which were active at that period, the empirical school believed that the mind was a *tabula rasa*, which received passively the impressions of sense; and, this belief, when its implications are thought out, results in the view that mind can never penetrate to a reality which is the source of these impressions. This consequence was gradually made explicit in the writings of Berkeley and Hume. The rationalistic school, on the other hand, assumed that pure thinking could grasp the ultimate realities; for example, that it could demonstrate the existence and attributes of God. Kant himself had been brought up in the rationalistic view, but had finally come to the conclusion that the pretensions of pure thought to know such ultimate realities are unwarranted. He continued nevertheless to believe in these realities, and

sense can be applied to things-in-themselves. This seems to me mistaken, but he is right in saying that if they can be so applied, they must be unschematised categories: e.g. causality as applied to things-in-themselves involves no idea of temporal succession.

¹ This is expressly stated by Kant in A 696 = B 724 and A 698 = B 726.

² See Chapter LIV for Kant's rejection of this 'transcendental use' of categories. For a defence of 'cognition by analogy'—as opposed to 'theoretical cognition'—see *Fortschritte der Metaphysik* (Phil. Bib. 46c, p. 107), and compare *Kritik der Urteilkraft* § 59 (V 352).

therefore, when he gave up rationalism, he was forced to the view that things-in-themselves are unknowable.

§ 6. *Idealism and Science*

The reasons for Kant's view are, however, deeper than this. In his thought idealistic and realistic tendencies are at work, and it is the combination of the two which produces the doctrine of the thing-in-itself.

Idealism, whatever be its ultimate value, is more than a mere confusion of thought or a temporary aberration of the modern mind. It is partly a reaction against science, an attempt to preserve the reality of human values in a mechanical world; but it is also related to the development of modern science (especially physics) in a more positive and intimate way.

The natural tendency of the human mind is realistic, and to common sense our ordinary world of tables and chairs and houses and trees is the real world. The world of tables and chairs is, however, very different from the world as known to physics. The development of physics forces on our minds the contrast between appearance and reality, between the world as it seems to common sense and the world as it is to the scientific observer. This in turn gives rise to further reflexions. If what is obviously real to common sense becomes mere appearance to the deeper insight of the scientist, may there not be a still deeper insight to which the real as known by the scientist is merely the appearance of a reality beyond?

The view that the scientist deals only with appearance is the view which Kant holds; and it rests, not on a mere sceptical fancy or plausible analogy, but on a criticism of science itself.

Such criticism is forced upon us in the present century, even more than in the time of Kant. Knowledge is developing so rapidly that the physical world as it appeared to science the day before yesterday is very different from the physical world as it appears to science to-day. Who knows how it will appear to-morrow? There are few thinkers who would claim that modern science gives us adequate knowledge of the world

as it really is; and even the fundamental concepts of physics are being subjected to criticism and revision. The scientists themselves are finding paradoxes and inconsistencies thrust upon them—as in the case of the Quantum Theory and the Theory of Relativity. It is even asserted that time is merely a human way of looking at things, and is not to be found in the physical world; and that we are aware only of our own measurements, but have no idea of what it is that we are measuring. Such assertions, made quite independently of Kant's influence, look very like a revival of the Kantian doctrine, and give an added interest to the argument of the *Kritik*.

No doubt it may be said with justice that all such distinctions between appearance and reality are made on the basis of knowledge (or presumed knowledge) of reality, and therefore they cannot justify a distinction in which reality becomes the unknown and appearance the known. The knowledge of reality required for the distinction may, however, be of the most general character, such as the knowledge that reality must be consistent with itself. If our theories of reality contradict one another, we know that what is asserted in them is at least partly appearance and not reality; but we may not be in a position to construct the true theory which would describe reality as it is. The knowledge that reality is self-consistent is a very empty kind of knowledge, and even Kant would perhaps admit we had that kind of knowledge of things-in-themselves.¹ He would, however, maintain that so empty a principle does not enable us to make any further advance in knowledge, unless things-in-themselves are given to us in experience, as he believes they cannot be.

At any rate Kant's doctrine is this, that scientific thought can penetrate beyond our passing sensations to a common and objective world of substances in interaction, but that this world is a world of things as they appear to human minds, and not a world of things as they are in themselves. It would be unreasonable without examining his arguments to dismiss this theory on the ground that it is a contradiction in terms.

¹ This seems to be implied in the Antinomies.

That the world, even as it is known to science, is essentially an appearance to human minds is an idealist doctrine (not of course the only idealist doctrine). It is because Kant is in a sense a realist that he holds this world not to be a creation of human minds, but to involve the reality of things-in-themselves.

§ 7. *Kant's Realistic Tendencies*

Kant is trying to do justice to different sides of our experience. He recognises that the world is given to us, and is not the product of thinking or of fancy. There is a kind of compulsion in our experience which is different from the intelligible necessity by which the conclusion follows from the premises of an argument. We can see the sky only as blue, and no amount of thinking will alter its colour. Kant never ceases to believe that there is a passive element in our experience, and that something given without any effort on our part is necessary for human knowledge.

It does not, however, appear that he *argued* from the existence of the given to the reality of things-in-themselves as its necessary cause. Such an argument is unconvincing in itself, and doubly unconvincing for a philosophy which confines the category of cause to the world of appearances.¹ Rather he would seem to regard the thing-in-itself as immediately present to us in all appearances, although its real (as opposed to its apparent) character is to us unknown.²

The reality of things-in-themselves is not considered by Kant to be in need of proof. It would, he says, be ludicrous that there should be an appearance without something which appears.³ This is the presupposition both of common sense and of realism, and it is neither questioned nor doubted by

¹ Compare A 609 = B 637.

² Adickes has argued this view with great force in *Kant und das Ding an sich*. Compare Vaihinger, *Commentar*, ii, pp. 110-11.

³ B XXVII; A 251-2. Taken as an argument, such a statement is unconvincing, for it depends on the term 'appearance', which may be inappropriate. Nevertheless it expresses one of the fundamental, if unreflective, convictions of the human mind, and this conviction is shared by Kant.

Kant. The only question with which he is concerned is whether the thing-in-itself can, or can not, be known.

For naïve realism things are in themselves just what they appear to be. The philosophy of scientific materialism strips off the secondary qualities as mere appearances, and regards the physical body as the thing-in-itself. Kant goes a stage further and strips off the primary qualities also as appearances (although appearances of a different kind). He is then left with a thing-in-itself which has no knowable characteristics other than that of being the thing, not as it appears to us, but as it is in itself.

Kant holds that the retention of the thing-in-itself distinguishes his philosophy from idealism as previously understood, and especially from such a philosophy as that of Bishop Berkeley.¹

Although Kant nowhere expressly says so, it seems reasonable to suppose that he believed the reality of things-in-themselves to be necessary, if there is to be a common objective world known to different individuals. Such a common objective world he everywhere assumes, and he assumes further that it is the object of scientific knowledge. Science in his view seeks to get beyond the merely individual point of view, to ignore what is due to the individual's sense-organs and position in space, and to discover the world which is common to all men who take the necessary trouble and perform the necessary measurements.

The existence of different individual knowing minds is also assumed by Kant. He does not attempt to prove it, or even to discuss our reasons for believing it.

§ 8. *Kant's Arguments*

If we are to follow Kant, we must start from the common-sense assumption that there are real things, and that these real

¹ See *Prolegomena* § 13 *Anmerk.* III (IV 293). It must, however, be remembered that Kant's belief in the permanent existence (or phenomenal reality) of physical substances is at least as important a ground for distinguishing his view from that of Berkeley. See the *Refutation of Idealism*.

things appear to us. The hypothesis¹ which Kant puts forward, and hopes to demonstrate in the *Kritik*, is that real things never appear to us as they are in themselves; that we can never know things as they are in themselves, but only their appearances, whose character is affected throughout by the nature of the knowing mind.

I have expressed this in a negative way, and the negative side of Kant's doctrine is of importance. Kant hopes to prove the uselessness of speculation about ultimate reality, and also to defend religion and morality against attacks by showing the incompetence of theoretical reason in such matters.² The positive side of his argument is, however, of equal, or even greater, importance. If metaphysics will only cease from the pursuit of an ultimate and unknowable reality and will concern itself with the world of appearances, then it will be able to enter on the sure path of an exact science.³ We must give up the speculative metaphysics of the past and substitute for it a metaphysic of experience.⁴ If we do so, we shall be able to acquire with little difficulty a limited, but complete, system of infallible knowledge. The *Kritik* does not profess to offer us such a system, but it offers us the complete plan of such a system, and there remains only the comparatively easy task of filling in minor details.⁵

The central principle of Kant's argument is the revolutionary and paradoxical view that we can have *a priori* knowledge of things only in so far as what we know of them is imposed by the nature of our own minds.⁶ Kant hopes to show (1) that we do possess *a priori* (that is, universal and necessary) knowledge, and (2) that there is no explanation of such knowledge unless the character of the objects as known is determined

¹ Compare B XXII n. ² See B XXXI. ³ B XVIII-XIX.

⁴ So we may suitably describe what Kant calls (in B XVIII) 'metaphysics in its first part'. This is dealt with in the Aesthetic and Analytic.

⁵ B XXII-XXIV. Compare A XXI and A 82 = B 108.

⁶ B XVIII, 'We can know *a priori* of things only what we ourselves put into them.' The roots of this view are to be found in Leibniz, but he failed to draw the obvious conclusions.

by the nature of our powers of knowing. If the second contention is true, it follows that our *a priori* knowledge is knowledge, not of things as they are in themselves, but of things as they must appear to us. We must give up hopes of attaining *a priori* knowledge in regard to ultimate reality, but we can determine with complete accuracy and precision our *a priori* knowledge of the phenomenal world. It is not the least of Kant's claims that his philosophy, and his alone, can offer a justification of our *a priori* knowledge in mathematics, and can determine the *a priori* principles presupposed in experimental physics.

✧ (Kant's central argument may be said to differentiate itself into three main arguments. These are concerned with intuition, understanding, and reason. Intuition involves an immediate relation to a given individual object, and in human beings intuition is always sensuous and not intellectual, which means that it is passive and not active.¹ Understanding is a power of thinking, by means of concepts, the objects given in intuition. Reason is a power of thinking objects which can never be given in sensuous intuition.)

In the Aesthetic Kant maintains that our intuitions of space and time are *a priori* intuitions, and are therefore due to the nature of our sensibility. Hence our *a priori* intuitions of space and time (the only *a priori* intuitions we possess) cannot give us knowledge of things as they are in themselves. They can, however, give us *a priori* knowledge of things as they must appear to human minds; for things can appear to human minds only if they are given to a sensibility which imposes spatial and temporal form on all the empirical intuitions it receives.

In the Analytic he argues that the categories of the understanding (such as cause and effect) are *a priori* concepts, and depend therefore on the nature of thought, not of things; they are meaningless and empty, except as applied to temporal and spatial things, that is, to appearances given in human intuition. Hence understanding cannot give us *a priori* knowledge of things-in-themselves, but only of appearances.

¹ A 19 = B 33; A 50 = B 74.

In the Dialectic (especially in the Antinomies) he argues that although reason must, by its very nature, seek to go beyond what is given to sense, and must strive to pass from the conditioned to the unconditioned, nevertheless it falls into hopeless contradictions when it supposes that our human categories apply to things-in-themselves. These contradictions are solved, if we distinguish the unknown thing-in-itself from its appearances, and if we recognise that our categories apply to appearances alone.

Therefore neither by intuition, nor by understanding, nor by reason, nor by any combination of these, can we have *a priori* knowledge of things-in-themselves, although we can have such knowledge of the phenomenal world.

These proofs may be said to be confirmed by the fact that when we accept their conclusions on purely intellectual grounds, we are able to justify our moral and religious beliefs. These are unjustifiable if we suppose that our categories apply to ultimate reality. If, for example, the category of cause and effect applies to things-in-themselves, freedom, which is necessary to morality, becomes a manifest impossibility.¹

The value of each of these arguments has to be considered on its own merits. In the present book I am concerned only with the first two arguments, but it must be remembered that the argument of the Dialectic is of equal importance. It must also be remembered that although we know nothing of things as they are in themselves, we do know how they appear, and must appear, to human minds; and further that the limitations of our theoretical knowledge are to a certain extent overcome, according to Kant, by a reasonable faith founded on our moral experience.

¹ B XXVIII-XXIX.

CHAPTER III

SYNTHETIC *A PRIORI* JUDGEMENTS

§ 1. *The Copernican Revolution*

Kant is attempting to make a revolution in philosophy. He believes that there comes, in the sciences, a point where some one introduces a complete change of method, and by this change the science becomes really a science: it ceases to be a mere 'groping about', and enters upon the sure path of steady progress. Such a change occurred in mathematics when demonstration by means of construction was introduced. It occurred in physics when Galileo and Torricelli developed the experimental method. It occurred in astronomy when the Copernican hypothesis was first propounded. Kant compares his own philosophical revolution with that initiated by Copernicus.

At first sight no comparison could seem more inappropriate. Copernicus substituted a heliocentric explanation in astronomy for the existing geocentric explanation. Kant seems, in the sphere of metaphysics, to be doing almost the precise opposite—making the human mind the centre of the phenomenal universe, so that things must conform to our mind, rather than our mind to things.

[Kant himself, however, states quite clearly the precise point of the analogy.¹ Copernicus explained the *apparent* motions of the heavenly bodies as due to the motion of the observer on the earth.² Kant similarly explains the *apparent* characteristics of reality as due to the mind of the knower.³ The analogy

¹ B XVI; B XXII n. The critics who condemn him on this point have simply failed to understand what he says.

² We shall see Kant's comparison most easily if we think of the fixed stars as having themselves no motion; for then their apparent motion is entirely due to the observer. Similarly we must regard things-in-themselves as neither spatial nor temporal; the fact that they appear to be so is entirely due to the nature of the human mind.

³ Kemp Smith (*Commentary*, p. 24) supports this interpretation by quotations from Copernicus, *De Revolutionibus*.

is not loose, and still less is it inappropriate: it is absolutely precise.)

Kant believes that the task of knowing the mind in its cognitive powers is comparatively easy, and has indeed been largely performed by the existing logic.¹ If the fundamental characteristics of reality as it appears are due to the nature of the knowing mind, it should not be difficult to give an exhaustive account of them.²

This will be the task of 'the first part of metaphysics', that is, of Kant's own positive metaphysics, which is concerned with the world of experience.

§ 2. A priori Knowledge

(Kant's main ground for attempting a revolution in philosophy is the fact that we possess *a priori* knowledge.³ Either our ideas must conform to things, or things (as known) must conform to our ideas.⁴ If the former hypothesis be adopted, *a priori* knowledge is impossible. Only on the latter hypothesis can the possibility of such knowledge be understood. This is the central and revolutionary doctrine of the *Kritik*.)

What then is *a priori* knowledge? It is knowledge which is independent of experience and of all sense-impressions.⁵ Knowledge which is derived from experience or sense-impressions⁶ is empirical or *a posteriori*:

Kant distinguishes pure *a priori* knowledge from knowledge which, although *a priori*, is not free from empirical elements.⁷

¹ A XIV.

² A XX; B XXXVI.

³ Compare Chapter II § 7. Kant is really thinking only of *synthetic a priori* knowledge, as is explained in § 4 below.

⁴ B XVI-XVII; A 92 = B 124; A 114; A 128-9; B 166.

⁵ B 2. Nevertheless such knowledge begins only with experience, and indeed can be separated from the matter of sense-impressions only by a skill which requires long practice; see B 1-2.

⁶ B 3. For Kant intuition, and therefore sense-impressions, are essential to human experience.

⁷ It may seem at first sight surprising that the example given of *a priori* knowledge which is not pure is the proposition 'Every event has its cause'. This is explained in A 160 = B 199-200. Compare A 171 = B 212-13 and also Chapter XXXVI § 3.

To this distinction he does not consistently adhere, and 'pure' is commonly used as synonymous with '*a priori*'.¹

The definition of *a priori* knowledge is negative, but this negative definition is supplemented by a positive criterion. Necessity and universality² are the criteria or marks by which we distinguish the *a priori* from the empirical. Experience can give us only generalisations from fact. We can say by experience that all swans, so far as we have observed them, are white; but we cannot say that they must be white, or that there can be no exception to the general rule. When we say that all triangles have the interior angles equal to two right angles, we are stating what is necessary and universal. The merely 'general' admits of exceptions, but the 'universal' does not.³

Kant holds that if we possess *a priori* knowledge, we must have a power or faculty of *a priori* knowledge.⁴ This doctrine is common to him and his rationalistic predecessors. They believed, however, as Kant himself did for long, that this power of *a priori* knowledge (which for them was reason) gave us knowledge of things-in-themselves. Kant argues that if we think out what is involved in the possession of *a priori* knowledge, we shall see that it must be derived from the nature of mind, and not from the nature of things. This doctrine must be distinguished from the mere assumption that we have a power of *a priori* knowledge.

§ 3. Temporal priority

(The *a priori* does not involve temporal priority. All our knowledge begins with experience, and there is no knowledge which precedes experience in time.⁵ Yet although all knowledge begins with experience, it is possible that some knowledge is not derived from experience, and is not dependent on

¹ Compare B 1 (the title of the section).

² Prichard suggests that these are ultimately identical (*Kant's Theory of Knowledge*, p. 4 n. 3).

³ In B 3-4 Kant distinguishes comparative or empirical universality from strict (or rational) universality. For the difference between 'general' and 'universal', see *Log.* § 84 *Anmerk.* 2 and § 21 *Anmerk.* 2 (IX 133 and 102).

⁴ B 4.

⁵ B 1; compare A 1.

experience. Experience may be something composite; and it may be that sense impressions give us the matter, while our powers of knowledge give us the form, of experience.)

This doctrine is stated emphatically at the beginning of the Introduction in both editions, and it is repeated again and again in the *Kritik* and in Kant's other writings.

A few examples will make this point clear. Pure concepts are said to lie already prepared in the human understanding, but they are developed on the occasion of experience.¹ We can discover in experience the occasioning causes of their production.² The impressions of the senses supply the first stimulus to bring experience into existence, an experience whose matter comes from sense, and whose form comes from pure intuition and thought.³ Without data even the elements of *a priori* cognitions would not be able to arise in thought.⁴

From these and many other passages⁵ we can say that on Kant's view the *a priori* is at work in experience from the start—there is no experience without a form—and it is gradually made clear to consciousness by reflexion. In that sense *a priori* knowledge is acquired and not innate. Kant is not concerned with the question of how experience develops—that is a matter for psychology—but with what is contained in experience,⁶ or with the presuppositions and conditions of experience. He does not suggest that in infancy we begin by knowing space and time and the categories, and then proceed to construct a world of colours and sounds.

All this is perfectly familiar to Leibniz and his school. Indeed it may be doubted whether the crude doctrine that the *a priori* is also temporally prior has been held by serious philosophers. It seems to be attributed to rationalists only through the misunderstandings of their opponents.

Nevertheless Kant habitually uses words like 'before' and 'precedes' in connexion with our *a priori* knowledge, where

¹ A 66 = B 91.

² A 86 = B 118.

³ Ibid.

⁴ A 96.

⁵ E.g. A 196 = B 241; *Diss.* § 14, 5 (II 401), § 15 *Cor.* (II 406); *Streitschrift*, 2. *Abschn.* (VIII 240); *Log. Einl.* II 2 (IX 17).

⁶ *Pröl.* § 212 (IV 304).

it is easy to suppose that he is speaking of temporal priority. There is, however, no consistency in such usage, if taken in a temporal sense, and it is frequently applied to the empirical. Intuition is said to precede thought.¹ Knowledge is said to start with the senses, to proceed thence to understanding, and to end with reason.² On the other hand transcendental truth is said to precede empirical and to make it possible,³ and original apperception is said to precede all particular experience.⁴ Where two things reciprocally condition one another, or form necessary parts of a wider whole, Kant seems to use these temporal expressions of either in relation to the other.

In certain cases the *a priori* does involve temporal priority. Thus of any individual circle we can say, *before* we have experienced it, that all the angles subtended by any arc of it will be equal. We might even make discoveries about a particular kind of geometrical figure, *before* we had found any example of that figure in the physical world. Furthermore, if space as known *a priori* is due to the nature of our mind, we can say that our mind has the form of space in it as a potentiality *before* experience begins. Such statements Kant certainly makes, and they are legitimate statements. Where his expressions can be interpreted in this way, it seems only fair so to interpret them.⁵

It is possible that he was at times misled by these legitimate statements into confusing logical and temporal priority, though I think it rash to affirm that he was. What seems to me certain is that such confusion is no part of his essential doctrine, and would have been indignantly denied by him if the question had been put to him explicitly.

Many commentators nevertheless have, to a greater or less degree, put a temporal interpretation on his words, and have supposed him to be giving an account of psychological development. To adopt this view, whether in a crude or in a subtle

¹ B 67; B 132; B 145. Compare A 225 = B 272-3, and also A 89 = B 122.

² A 298 = B 355.

³ A 146 = B 185.

⁴ A 117 n.

⁵ E.g. A 26 = B 42; A 33 = B 49; A 267 = B 323.

form, is to reduce Kant's theory to absurdity. An interpretation which has this result is *prima facie* an unsatisfactory interpretation. It seems only fair to Kant to see whether his doctrines do not appear more convincing, or at any rate more plausible, when interpreted in accordance with his own emphatic statement, and in accordance with what must obviously be the truth, if the existence of *a priori* knowledge is to be admitted at all.¹

For myself, the more I read Kant, the more I am convinced that for him the *a priori* is the logically, or as he calls it the objectively, prior; and I would call especial attention to one passage which is far too much neglected, a passage concerned with time, but applying also to all other *a priori* ideas. Time, he says, is *objectively* prior to all changes, as the formal condition of their possibility. *Subjectively*, that is, in actual consciousness, the idea of time is, *like every other*, given only through the stimulus (*Veranlassung*) of sense-perceptions.² I can conceive no clearer statement of Kant's fundamental position.

§ 4. *Types of a priori Knowledge.*

Do we actually possess *a priori* knowledge? Kant gives examples to show that we do.³

Ideas of space and substance are *a priori* ideas. The judgements of mathematics are *a priori* judgements. *A priori* judgements are to be found even in common sense, as for example the judgement that every event must have a cause. Unless such judgements are true, there can be no certainty in experience, and no basis for physical science.

Moreover there is a claim made by metaphysics to possess *a priori* knowledge going beyond experience,⁴ as in the judgement that the world has no beginning in time. Such a claim demands criticism, but the necessity for criticism is overlooked

¹ On this point of interpretation I find myself consistently at variance with Professor Prichard, though I believe that if his interpretation is correct, his criticisms are unanswerable.

² A 452 n. = B 480 n.

³ B 4 ff.

⁴ Ibid.

for three reasons.¹ The first is that the success of mathematics produces an expectation of equal success for metaphysics. This expectation is unfounded, because the success of mathematics depends upon intuition, and there can be no intuition in metaphysics—we cannot intuit the beginning (or absence of beginning) of the world. The second is that in metaphysical thinking we are never in danger of being contradicted by experience. And the third is that a great deal of the *a priori* work of reason consists in mere analysis of our concepts of objects. This is a useful task, necessary to make our concepts distinct.² It does not itself extend our knowledge, but its success encourages us to imagine that by the activity of pure reason we can extend our knowledge without any help from experience.

— This raises the question of the distinction between analysis and synthesis, or between analytic and synthetic judgements.³

All analytic judgements are *a priori*: they involve no appeal to experience. This is true even when they depend upon analysis of empirical concepts. With analytic judgements we have no concern in the *Kritik*. They articulate our knowledge, but do not add to it. We are concerned only with *a priori* judgements which extend our knowledge, and these are necessarily synthetic.

(How then are synthetic *a priori* judgements possible? This is the central question of the *Kritik*!)

Synthetic *a priori* judgements are to be found in mathematics, in physics, and in metaphysics.⁴ These sciences do not advance by the mere analysis of concepts. Hence we have to consider the synthetic *a priori* judgements of each of these sciences in turn, and to ask how they can be justified. We have no right to assume that they can all be justified in the same way.

This gives us three questions to answer. *Firstly, how is pure mathematics possible? Secondly, how is pure physics (or the pure*

¹ A 4–6 = B 8–10.

² Compare A 65 = B 90.

³ There are other kinds of analysis than that found in analytic judgements, for example, analysis of intuitions. The analysis of which Kant is speaking here is analysis of *concepts* which we already have of *objects*—see A 5 = B 9. In so far as we judge the objects on the basis of such analysis, we have analytic judgements.

⁴ B 14 ff.

part of physics) possible? And thirdly, how is pure metaphysics possible?

The success of mathematics and physics proves *that they are* possible, and our only question is *how* they are possible. It is otherwise with metaphysics, which has behind it a consistent record of contradiction and failure. In the case of metaphysics we have to ask *whether* it is possible, and only if we get an affirmative answer, need we ask *how* it is possible.

In regard to metaphysics Kant substitutes two other questions. Men have a natural disposition towards metaphysical thinking, and we must ask 'How is metaphysics possible as a natural disposition?' We cannot, however, be satisfied merely with an answer to this question. We want to know whether our metaphysical questions can, or can not, be answered. Hence we have a second question, 'How is metaphysics possible as a science?'

(The first question is 'How is it that the problems of metaphysics necessarily arise in our experience?'¹ The second question is 'How can these problems be solved?')

Kant believes that his Copernican revolution will re-establish metaphysics as a science. It will introduce a new kind of metaphysics, which will decide whether metaphysics can, or can not, deal with these problems. It will enable us with confidence either to extend the use of pure reason or to set it definite limits.²

(The latter alternative is the actual result of the *Kritik*. Kant's metaphysics, as we have seen,³ professes to give us certain and *a priori* knowledge within the limits of experience. If we seek to go beyond the limits of experience, we must do so, not by knowledge, but by faith.)

§ 5. *Analytic and Synthetic Judgements*

The turning-point of this discussion is the distinction between analytic and synthetic judgements.

At first sight no distinction would seem to be simpler.

¹ This is not for Kant a psychological question. He is asking why reason must necessarily raise certain problems.

² B 22.

³ Chapter II § 8.

Either the predicate B belongs to the subject A as something which is contained (covertly) in the concept of A—this is an analytic judgement: or else the predicate B lies entirely outside the concept of A, although it is connected with it—this is a synthetic judgement.¹

All analytic judgements, as we saw above, are *a priori*. It makes no difference whether the subject-concept is itself empirical or *a priori*; for if the concept is given, we require no further appeal to experience to make the judgement. Examples of analytic judgements are 'Gold is yellow', and 'All triangles are three-sided figures'.

Synthetic judgements may be either *a posteriori* or *a priori*. 'Gold is found in Siberia' is a synthetic *a posteriori* judgement. 'All triangles have the three interior angles equal to two right angles' is a synthetic *a priori* judgement. In both cases the predicate adds something which is not thought in the concept of the subject, but the second judgement is characterised by necessity and universality, and is therefore *a priori* as well as synthetic.

Is this distinction of analytic and synthetic a subjective distinction, so that what is analytic for one man would be synthetic for another? Kant's language in places might suggest that the distinction is subjective; but this, I think, is true only where the subject-concept is empirical. Thus, speaking of *empirical* concepts, he says that one man can think in the concept of gold a quality (such as not rusting) of which another man may know nothing.² This is obviously true, since empirical concepts are derived from experience, and the experience of different men is different. Hence it seems rather artificial to regard as *a priori* those analytic judgements whose subject-concept is empirical. 'Gold is yellow' is surely no more *a priori* than the judgement 'The house will fall in, if its foundations are undermined'; and this Kant refuses to call completely *a priori*.³

¹ A 6 = B 10. It should be observed that in B 19 Kant claims his distinction to be a novel one.

² A 728 = B 756.

³ B 2. On the other hand, it seems not unreasonable to say that the judgement 'All bodies are extended' is an analytic judge-

In dealing with analytic judgements Kant is primarily concerned with those in which the subject-concept is itself *a priori*. Such judgements he believes to be of real importance in philosophy. Here he certainly regards the concept as containing 'marks'¹ which cohere through the nature of the concept itself, and not through the accident of the individual's experience.

{ We must presume that the distinction between analytic and synthetic judgements implies a difference in the relation of subject-concept to predicate-concept which, so far as it has any importance, does not differ for different persons. Kant does not mean his distinction to be merely a subjective one.

§ 6. *Analytic Judgements*

The analytic judgement, although it takes place by means of analysis of the subject-concept, is not a judgement about the concept,² but about the objects which are supposed to fall under the concept. 'All bodies are extended' is not a judgement about the concept of body, but about bodies themselves.³ Some analytic judgements of metaphysics may have no object, but their authors intend them to refer to an object.

Still less is the analytic judgement about the meaning of a word. Words unfortunately do not contain their own meaning. It would be easier to learn foreign languages if they did.

\ An analytic judgement is not a mere tautology, like 'Man is man'. Kant sometimes describes the relation of predicate to subject in an analytic judgement as one of identity, but he does not mean that the subject and the predicate are the same.

ment. We could not know bodies at all without knowing that they are extended, but a blind man might know gold without knowing that it is yellow.

¹ '*Merkmale*'. These may be taken as 'partial' concepts which together constitute the whole concept; see Chapter IX § 4.

² Hermann Cohen and Kinkel maintain that it is, but this seems to me both false in itself and un-Kantian; compare A 736 = B 764.

³ Compare A 68-9 = B 93-4. The example there is 'All bodies are divisible'—an analytic judgement.

Analytic judgements make explicit in the predicate what is only implicit in the subject-concept.¹)

(The difficulty, however, is to know what is implicit, and what is not implicit, in a concept. It might seem to be implicit in the concept of triangle that the interior angles are equal to two right angles; but this Kant would deny to be an analytic judgement.)

It might be thought that by analytic judgements Kant meant definitions, or at any rate judgements which state either the essence, or part of the essence, of a thing. Even so, there are obvious difficulties as to what constitutes the essence of a thing. This view is, in any case, not the view of Kant himself. He resents any attempt to equate his distinction of analytic and synthetic judgements with the distinctions previously recognised in logic.²

The logic of the time recognised the following distinctions.³ The *essence* consists of certain primitive and constitutive marks called strictly *essentialia*. The *attributes* have their sufficient ground in the essence, and are derivative from it.⁴ The *modes* (inner determinations) and *relations* (external relations) are not so derivative.⁵ ✓

¹ *Log.* § 37 (IX 111). It should be unnecessary to observe that analytic judgements are made by the analysis of a *concept* (the subject-concept) and not by analysis of a *thing* (the subject); yet I find confusion on this point, not only in beginners, but in commentaries on Kant. It is by synthetic judgements that we make analyses of things.

² *Streitschrift*, 2. *Abschn.* (VIII 228 ff), which is the *locus classicus* for this question; compare also B 19. To treat this distinction as familiar to Kant's predecessors—and this is the prevalent view—is to get a distorted idea of Kant's thinking.

³ Compare *Log. Einl.* VIII (IX 60-1); *Streitschrift*, 2. *Abschn.* (VIII 228 ff); *Metaphysik*, p. 24; G. F. Meier, *Auszug* § 121; Baumgarten, *Metaphysica* § 50 (XVII 37). See also Chapter XXXIX § 3.

⁴ The *essentials* in the strict sense and the *attributes* are sometimes described together as *essentialia* (or *ad essentialiam pertinentia*). All other marks, whether modes or relations, are described as *extra-essentialia*.

⁵ If the essence is present, the attributes must be present, but the modes and relations need not be. Thus a man may be rational (the essence) without being either learned (a mode) or a master (a relation).

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(The difficulty, however, is to know what is implicit, and what is not implicit, in a concept. It might seem to be implicit in the concept of triangle that the interior angles are equal to two right angles; but this Kant would deny to be an analytic judgement.)

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Although all attributes have their sufficient ground in the essence, some must be known by analytic, and others by synthetic, judgements.¹ Thus in the judgement 'All bodies are divisible', divisibility is an attribute grounded on extension, which is part of the essence of body. Given the concept of body and the law of non-contradiction, we can make the judgement, which is consequently analytic. On the other hand in the judgement 'All substances are permanent,' permanence is an attribute grounded on the essence of substance, but it is not contained implicitly in the concept of substance.² Given the concept of substance, we cannot assert, merely by the law of non-contradiction, that all substances are permanent. Hence the judgement, although *a priori*, is synthetic.

(The distinction between analytic and synthetic judgements therefore cannot be made by reference to the distinction between essence and attributes.)

Kant's theory is not so simple as it looks, and the nature of analytic judgements is not altogether clear. Our main concern is, however, with synthetic judgements.

§ 7. Synthetic Judgements

Of synthetic judgements we can say three things. Firstly, the predicate contains more than is contained, even covertly, in the subject-concept. Secondly (another way of saying the same thing), given the subject-concept, we cannot, merely by the law of non-contradiction, make the judgement. Thirdly, to make a synthetic judgement we require, in addition to the subject-concept, something else or what Kant calls a third thing. For the present we may describe this as intuition—empirical intuition if the judgement is *a posteriori*, pure intuition if the judgement is *a priori*.³ The third point, however, cannot

¹ Kant accordingly speaks of analytic and synthetic attributes.

² The concept of substance is here the concept of the ultimate subject of all predicates. In A 184 = B 227 Kant himself says that the proposition 'Substance is permanent' is tautological; but there presumably he has in mind, not the pure, but the schematised, category. Compare Chapter XXXIII § 4.

³ We shall find later that this requires qualification; see Chapter XXXV § 4.

be assumed at the present stage, since it is what Kant hopes to prove.

The judgement that the three interior angles of a triangle are equal to two right angles is a synthetic judgement, because it cannot be made, according to Kant, apart from intuition. It states a necessary attribute of all triangles, but not one which can be discovered by analysing the concept of triangle.

Whatever be the difficulties of the distinction, it can hardly be denied that we make synthetic judgements, and some of these appear to be *a priori*. If so, Kant has a real problem.

We might indeed raise objections of a more fundamental kind. Perhaps it is a false view to regard judgement as an advance from the concept of the subject to the predicate either by analysis or by synthesis. Perhaps every judgement is essentially both analytic and synthetic,¹ necessarily analysing a whole into its parts, and at the same time binding together the parts in a whole. Perhaps it is only in material operations, such as cutting wood and building houses, that analysis and synthesis, breaking up and putting together, can be separated from one another. These and similar objections are highly relevant to a theory of predication, but they obscure, rather than illumine, the problem which presented itself to Kant.

§ 8. Kant's Problem

Kant's central problem is 'How are synthetic *a priori* judgements possible?'

This question is not concerned with subjective possibility. It does not ask how we come to make such judgements, but how such judgements can be made truly.² Truth for Kant implies correspondence with reality, and his question, at least in regard to mathematical judgements, has two sides. He is asking how we can pass, on *a priori* grounds, from a subject-

¹ I hope to show later that for Kant himself both analysis and synthesis are present in all judgements; see Chapter XIV § 1. But to say this is to use the words in a different sense.

² The case of metaphysics is rather different, but even there we do not ask how we come to make metaphysical judgements—a psychological question.

concept to a predicate not contained in it—as we do in pure mathematics. He is also asking how such synthetic *a priori* judgements can be true of reality—how for example mathematical judgements can apply to the actual world. These two questions are different, but are not always distinguished by Kant with sufficient clarity.

Kant does not concern himself at first with the question how synthetic *a posteriori* judgements are possible.¹ His explanation is that, in addition to the subject-concept, we must have *something else* which justifies us in ascribing to the subject a predicate not contained in the subject-concept. That 'something else' is our complete experience of the object which is referred to by the subject-concept.

Such is the common-sense answer to the question, and at this stage it is sufficient. For common sense, however, the object is the thing-in-itself. When Kant argues later that the thing-in-itself cannot be an object of experience, it becomes incumbent upon him to explain what an object of experience can be. This is one of the questions with which Kant's philosophy will deal.²

The main point of Kant's problem, however, is this. In synthetic *a posteriori* judgements we have a third thing, namely experience of the object (and ultimately empirical intuition), which justifies us in making our synthesis of subject and predicate. Where are we to find a third thing to justify our synthetic *a priori* judgements? Such a third thing we must have, because *ex hypothesi* we cannot pass to the predicate by mere analysis of the subject-concept. And clearly the third thing cannot be experience; for experience can give us only matter of fact, and cannot give us that strict necessity and universality which is asserted in *a priori* judgements. The justification of synthetic *a priori* judgements in mathe-

¹ A 8, B 12.

² A 104 ff.; A 189 = B 234 ff.; etc. I can find no reason to charge Kant with inconsistency because he does not deal with this problem in his Introduction, but gives us a common-sense answer. It happens also to be the true answer, and it remains true even when we come to recognise that there is an *a priori* element in experience.

matics, in physics, and in metaphysics, will in each case depend on whether or not we can find this third thing on which to ground the synthesis. When we have found it for mathematics and for physics, we shall have a deeper insight, not only into the nature of synthetic *a priori* judgements, but also into the nature of our ordinary experience.

§ 9. *The Reality of Kant's Problem*

The only way to deny the reality of Kant's problem is to deny the existence of synthetic *a priori* judgements, and to assert that judgements which seem to be such are either not synthetic or not *a priori*.

Mathematical judgements certainly seem to be *a priori*; and even if we seek to overcome the absolute antithesis between *a posteriori* and *a priori*, we can hardly deny that there is a real difference between mathematical judgements and judgements of the type 'All swans are white'. Such a difference requires investigation. It may, however, be maintained that all mathematical judgements are analytic. This view is the predominant view of mathematical logicians at the present time; and if it is true, it cuts the ground from under Kant's feet.

As regards Kant's second type of judgement (which forms the basis of physical science) a different line would have to be taken. 'Every event has a cause' is certainly not an analytic judgement. If we are to reject Kant's starting-point, we must deny that it is an *a priori* judgement, and assert either that it is false, or else that it is a mere hypothesis or postulate. Neither of these views is to be lightly dismissed, but each has its own difficulties.

The third or metaphysical type of judgement—e.g. 'The world has no beginning in time'—is of less importance as a starting-point, but it obviously is not analytic, and it does not rest on experience. The question whether such a judgement can properly claim truth is an important question.

★ The nature of mathematical thinking and its relation to the empirical world, the ultimate presuppositions of physical science, the possibility of a metaphysical knowledge trans-

cending our finite experience—these are three fundamental problems, which still are, and are likely to remain, of the most pressing concern to philosophy.) Kant professes that he is able to solve them, and it would be foolish to quarrel with the terms in which they are stated. Our task is to see what his solution is. And although there are difficulties about his starting-point, we may perhaps still claim that his initial assumptions are sufficiently plausible to justify us in subjecting his argument to further examination.

BOOK II

SPACE AND TIME

CHAPTER IV

SENSE AND SENSIBILITY

§ 1. *The Transcendental Aesthetic*

The *Kritik of Pure Reason*, as a transcendental science, is concerned with our way of knowing objects, so far as that is possible *a priori*.¹

Our way of knowing objects is by means of sensibility and understanding (two powers which may have a common root).² We must consider whether each of these contributes an *a priori* element to knowledge. The part of the *Kritik* which deals with the *a priori* element contributed by sense is the *Transcendental Aesthetic*. [For this purpose Kant first of all isolates sensibility;³ that is to say, he excludes from consideration everything contributed to our knowledge of objects by thought or understanding. Secondly, he isolates the *a priori* element contributed by sensibility. He does so by excluding everything that belongs to empirical sensation. This method of elimination will leave us with pure intuitions, or the pure forms of intuition, which we shall find to be space and time.]

§ 2. *Intuition*

At the beginning of the *Aesthetic* Kant gives us a rather complicated explanation of the terms which he employs. There is a considerable element of ambiguity in what he says, and the full meaning of his terms can be grasped only from their use as the argument develops.⁴ It is a mistake to regard

¹ B 25. It excludes from its consideration such *a priori* knowledge as arises from mere analysis of concepts, and it examines only the sources and limits of synthetic *a priori* knowledge.

It excludes also the *practical* synthetic *a priori* judgements of morality. Compare A 14-15 = B 28-9 and *Grundlegung* (IV 420).

² A 15 = B 29.

³ A 22 = B 36. For other examples of the method of isolation, see A 62 = B 87, A 305 = B 362, A 842 = B 870.

⁴ Compare Chapter V § 9.

⁵ This is explicitly recognised by Kant himself. See *Vaihinger, Commentar*, ii, p. 18.

all his statements as premises, and a still greater mistake to suppose that he is setting forth complete arguments.¹ We must take what he says partly as a statement of what he intends to prove; and this cannot be completely understood on the common-sense level on which we might naturally be supposed to begin.²

I propose to deal only with some points of general importance.

For Kant sensibility is essentially passive, while understanding is active. The former is a receptivity or capacity;³ the latter an activity or power.⁴ Sensibility alone is the source of intuitions, while understanding is the source of concepts. An intuition is a singular idea⁵ (*repraesentatio singularis*); a concept is a general idea (*repraesentatio per notas communes*), an idea of what is common to different objects.⁶

As has often been pointed out,⁷ there is a certain ambiguity in words like 'intuition'. 'My intuition' may mean 'my intuiting' or 'what I intuit'. This ambiguity is to be found in Kant.

¹ In particular the statement that the form of appearances (or sensations) must lie *a priori* in the mind (A 20 = B 34) should, I think, be taken, not as a premise, but as a statement of what is to be proved. It is true that this statement is supported by what looks like an argument—'that in which alone sensations can be arranged and posited in a certain form cannot itself be sensation'. This seems to me to be a summary of the main argument of the Aesthetic rather than an attempt to establish a premise for that argument. If we regard it as establishing Kant's premises it is hopelessly inadequate.

² The beginner is well advised not to linger too long over these preliminary difficulties.

³ *Rezeptivität* or *Fähigkeit*. A 19 = B 33.

⁴ *Spontaneität* or *Vermögen*. A 51 = B 75. The use of *Fähigkeit* and *Vermögen* is, however, not consistent. There seems to be no general term which covers both. For the general term either may be used, although I think the latter is the word more commonly employed.

⁵ *Vorstellung*. This is a general term which covers both intuition (*Anschauung*) and concept (*Begriff*). I usually prefer to translate it as 'idea' rather than as 'representation'. It is sometimes used for 'my intuiting' or 'thinking' as well as for 'what I intuit' or 'what I think'. Where the former sense seems prominent I sometimes use 'representation' as more suggestive of an act.

⁶ *Log.* § 1 (IX 91). Compare B 133 n.

⁷ Kant himself points it out very clearly in a passage the reference to which I have unfortunately lost.

Thus he refers to 'the indeterminate object of an empirical intuition',¹ where 'intuition' would appear to mean 'intuiting'. On the other hand he speaks of space and time as intuitions and not concepts. Here he must mean that they are individual things intuited and not merely common characters conceived.²

There is, however, a special reason for this latter usage. It must be remembered that Kant is not a representative idealist (except in so far as he considers our ideas to be appearances of unknown things-in-themselves). Space and time have for him no reality apart from human minds. They are not things-in-themselves, which happen also to be intuited. Their whole being depends on our intuiting, and calling them intuitions or ideas serves to bring out this view.³

Intuitions in human beings are sensuous. That is to say, they come to us by means of passive sensibility. They are not created by us but simply received. We are able to intuit only so far as an object is given to us, and an object is given to us only so far as it affects our minds⁴ and produces a sensation.

This statement is difficult because of the ambiguity of the word 'object'. The simplest interpretation is to suppose that Kant is speaking on the common-sense level. The object may be taken to be a body, such as a chair. It is given to us so far as it affects our minds through the sense-organs and produces, for example, a sensation of colour.

As we have seen,⁵ Kant analyses the object of common sense

¹ A 20 = B 33-4.

² Space and time (individual things) must be distinguished from spatiality and temporality (the common characters of all spaces and times).

³ Similarly an object such as a house, when viewed transcendently, is said to be, not a thing-in-itself, but an appearance or idea. See A 190-1 = B 235-6. I have not attempted to avoid using 'intuition' for 'what is intuited'—or other expressions of the same kind. The attempt to do so in a detailed exposition of Kant would produce too many complications.

⁴ '*Gemüt*' (mind) is a colourless word which Kant uses to avoid the metaphysical implications of '*Seele*' (soul). It is equivalent to '*Vorstellungsfähigkeit*' (a capacity for ideas). See A 19 = B 34.

⁵ Chapters I § 9 and II § 2. Compare *Prol.* § 13 *Anmerk.* II (IV 289).

into the thing as it is in itself and as it appears to us, or in other words into the thing-in-itself and the phenomenal object. If we suppose this analysis to be already made, Kant's statement (that an object affects our minds and produces a sensation) applies *both* to the thing-in-itself *and* to the phenomenal object.¹

The thing or object which is given to us is, however, given to us only as it appears, not as it is in itself. It is in short given as a phenomenal object. If we speak strictly, even the phenomenal object is given only as regards its matter.² What is *given* to us is, for example, a colour. We *think* that it is the colour of a chair. Without thought, although we might see a colour,³ we could not know that it was the colour of a chair, or indeed of anything.⁴ This is what Kant means when he says that intuitions without the concepts of thought are blind.⁵ Hence without thought there is no determinate object, no phenomenal object in the strict sense. What is given, namely the mere *sensum*, may be called the indeterminate object,⁶ the object as a mere appearance⁷ to sense apart from thought.

¹ For the non-temporal causality of the thing-in-itself, which does not affect our sense-organ but our mind, see Chapter II § 2. This may be what Kant has chiefly in mind in the present passage. For the causality of the phenomenal object, see Chapter II § 3. Sensations are the product of a double causality.

² At the present stage the 'matter' may be taken as the *sensum*, the seen colour and heard sound. In some places the matter is said to be the sensation, and in other places it is said (as in A 20 = B 34) to correspond to the sensation. Compare Chapter XXXVIII § 1.

³ Synthesis, and perhaps thought, may be necessary even to see a colour, but this we may for the present ignore.

⁴ To know this we require, not only the empirical concept of chair, but also the category of substance and accident.

⁵ See A 51 = B 75.

⁶ See A 20 = B 34. The indeterminate object is the thing (always in the last resort the thing-in-itself) as it appears to mere sense. The phenomenal object is the thing as it appears to sense and thought. The latter alone is an object, if we speak strictly.

⁷ Compare A 92 = B 125. A 248-9 suggests that the indeterminate object (intuition undetermined by the categories) should be called an 'appearance' (*Erscheinung*), and the determinate or phenomenal object should be called a 'phenomenon'. This distinction is usually neglected by Kant.

At the present stage Kant is not in a position to explain the part played by thought. In any case the phenomenal object, if it is to be a phenomenal object, must *both* be given to sense *and* be thought by understanding.¹ Hence it is not incorrect to say that the phenomenal object must be given to sense: it can indeed be given in no other way.

Intuition itself may be analysed into form and matter. The matter is the sensation or *sensum*,² which may also be called an impression.³ This is the 'effect' of the object which 'affects' our minds.⁴ The form is the space and time in which our sensations are arranged and is due, as Kant hopes to prove, not to the thing affecting us, but to the nature of our minds.

Intuition is immediately related to an individual object⁵ and is distinguished from thought or conception by being so related. Thought is always mediate or discursive,⁶ always related to its object by means of intuition. Here again the word 'object' is ambiguous, and Kant may be speaking on a common-sense level. If we insist on distinguishing the thing-in-itself from the phenomenal object, his primary concern would seem to be with the latter. It must be sufficient to say at present that the

¹ I pass over the fact that we may know phenomenal objects not given directly to our senses, if they are connected by means of the Analogies with objects which are so given. See A 225 = B 272 ff.

² See A 42 = B 60, A 167 = B 209, and compare *Fortschritte der Metaphysik* (Phil. Bib. 46c, p. 91). I pass over the difficulty that the matter of an appearance is said to 'correspond to' sensation. See A 20 = B 34.

³ 'Eindruck' (*impressio*); see *Fortschritte der Metaphysik* (Phil. Bib. 46c, p. 91).

⁴ A 19 = B 34. The 'object' here is again ambiguous. It may be taken, primarily at least, as the thing-in-itself.

⁵ The fact that this relation is said (in A 20 = B 34) to be 'through sensation' does not make it mediate, for sensation is not separable from intuition, but is an element within it. It may be asked whether 'intuition' in this context means 'intuiting' or 'the content of intuition'. On the whole Kant would seem not to distinguish these clearly in such assertions. In intuiting we are directly or immediately aware of the object, and the content of the intuition is the quality of the object. The object consists of such contents combined together in accordance with the categories. Indeed the whole object may be described as (the content of) one intuition. ⁶ See Chapter X § 7.

phenomenal object (such as a chair or a table) is directly and immediately given to intuition. Whatever be the part played by thinking, when we feel the hardness and see the colour of a chair, our minds are in an immediate relation to the chair, and the chair is so far immediately present to our minds.¹

§ 3. *Sense and Understanding*

*(It is an essential part of Kant's doctrine that both sense and understanding, both intuition and conception, are necessary for knowledge of objects.² Through sense objects are given, and through understanding they are thought.³ Thoughts without the content of intuition are empty, and intuitions without the concepts of thought are blind.⁴]

There is therefore an abstraction involved in dealing with sensibility by itself, and the Aesthetic is a provisional and incomplete account of our knowledge of space and time. In awareness of space and time as individual objects thought is always involved.⁵ Thought gives us the synthesis without which there is no unity in any object. This necessary synthesis is in the Aesthetic ignored, but there is no more reason to suppose that Kant was unaware of this fact here, than there is in the corresponding parts of the *Prolegomena*. The provisional exclusion of the part played by thought must always be borne in mind.

¹ I pass over many difficulties here : for example, that the secondary qualities may differ for different individuals, and also that if we are to have intuition, there must be present an element of synthesis, and so of imagination.

² When Kant speaks either of sense or of understanding as if they gave us knowledge in separation from one another, this is a loose employment of the term 'knowledge'. In the phrase 'knowledge of objects' the word 'objects' refers to phenomenal objects.

³ A 15 = B 29.

⁴ A 51 = B 75. Compare A 258 = B 314.

⁵ B 160 n. Compare A 99-100. Though space is here spoken of as an 'object', strictly speaking neither space nor time is an object. An object must be an appearance of things-in-themselves and must be given in empirical intuition. Space and time are only conditions of objects, but we may call them individual objects by a kind of analogy. See A 291 = B 347, and compare B 147 and A 156-7 = B 195-6.

§ 4. *Outer and Inner Sense*

Sense for Kant covers both outer and inner sense.¹ By outer sense (which includes sight, hearing, etc.) we are aware of objects in space.² By inner sense we are aware of our own states of mind in time. Both inner and outer sense give us only phenomena, and not things-in-themselves.

The doctrine of inner sense has often been criticised. It gives rise to difficult problems, both in Kant's system and in itself. Yet in itself it is by no means unreasonable. For Kant an *immediate* cognitive relation to an individual object is possible only through intuition, and intuition is given only by means of sensibility.³ As we have clearly such an immediate cognitive relation to our own individual states of mind, it is not improper to say that we have an inner sense.

It must be remembered that by states of mind Kant does not mean the seeing as opposed to the seen. All the stuff or matter of inner sense (so far as it is matter for *knowledge*) comes to us from outer sense.⁴ The stuff of inner and the stuff of outer sense overlap, if they do not coincide.⁵ By inner sense

¹ A 23 = B 38.

² I think the word 'outer' may imply also that we are in contact with something other than ourselves.

³ A 19 = B 33. Compare *Log.* § 1 (IX 91).

⁴ B XXXIX n.; B 67; compare A 34 = B 50, and A 34 = B 51. The phrase in brackets may exclude feelings and desires (and perhaps thoughts), which are also known through inner sense (A 357-8). By 'matter for knowledge' Kant seems to mean 'matter for knowledge of *objects*' (as opposed to *subjects*). In B 66 the feeling of pleasure and pain and the will are excluded from things in *knowledge* which belong to intuition. This exclusion may perhaps qualify the assertion in B 67, where the ideas of outer sense are said to constitute the proper stuff with which we occupy our mind. If Kant holds that the matter of feelings and desires comes from outer sense, we certainly require a fuller explanation of this view. In A 357 he denies that thought, feeling, inclination, or resolution can be objects of outer intuition.

⁵ See for example A 98-9, and compare A 34 = B 51, where Kant says that by means of inner intuition we grasp also all outer intuitions in our mind. This is confirmed by *Anthr.* § 7 and § 9 (VII 141, 142 and 144). E.g. Kant says sense-perceptions can be called only inner

we are immediately aware, not only of our feelings and desires, but also of the stream of ideas which, whatever else they are, are for Kant modifications or states of our minds. Even if colours are things-in-themselves, or qualities of things-in-themselves, they modify or qualify the mind in the sense of coming before it at one time and not at another. Of this fact we are immediately aware. Others may infer that I am seeing a red pillar-box now, and they may be right. But I, and I alone, can have immediate knowledge of its presence to my mind at the moment. Such immediate knowledge is for Kant impossible apart from sensuous (or passive) intuition. It is concerned with something internal or private to ourselves,¹ and therefore Kant speaks of inner as opposed to outer sense.²

It is more remarkable that just as space is the form of outer sense, so time is the form of inner sense. This means that time cannot be intuited outwardly, any more than space can be intuited as something in us.³

The use of the words 'inside' and 'outside' in regard to the mind always leads to confusion. Space, for example, is certainly 'in us', if to be 'in us' means to be an object of knowledge. It is also 'in us' as well as outside of us, if to be 'in us' means to be in our bodies.⁴

Nevertheless, if we may put Kant's point in another way, our minds seem to last through time, as they do not seem to extend through space. We are immediately aware only of colours or other sensa, and perhaps bodies, as in space. If we

appearances. Compare *Die falsche Spitzfindigkeit* (II 60), where inner sense is said to be the power of making one's own ideas an object of one's thought.

¹ In the sense that I alone have *immediate* knowledge of a thing's presence before my mind. This does *not* mean that the thing present to my mind is itself necessarily a private, and not a common, object.

² The doctrine of 'inner sense' is to be found not only in Locke, *Essay* II, 1, Sect. 2 ff., but in Baumgarten, *Metaphysica* § 535 (XV 13). According to Erdmann (*Kriticismus*, p. 51) it is also to be found in Tetens, *Philosophische Versuche*, Bd. I, Versuch I, No. VII.

³ A 23 = B 37. Compare Chapter VII § 2.

⁴ In A 373 'outside us' (when it does not refer to things-in-themselves) means simply 'in space'.

think of minds as being in space, we do so because we ascribe to them the space occupied by the body with which they seem to be connected. On the other hand, we seem to be immediately aware of our minds as living through time, or at least to be immediately aware of the stream of our ideas as continuing through time.

Kant's view implies that we are immediately aware only of our own mental evolution as in time, and that we have not this immediate awareness of the changes in the physical world. The negative side of this contention must be considered later.¹

No attempt is made by Kant to show by *a priori* reasoning that there must be inner and outer senses, or that there must be two pure forms of intuition and two only. This has simply to be accepted as a fact.² He does, however, argue that other ideas—such as motion and change—which belong to sensibility presuppose something empirical.³

Kant's theory of inner sense must be reserved for subsequent consideration.⁴ It is commonly held that this part of his doctrine is confused, and there can be no doubt that it ought to have received fuller treatment. All I maintain here is that it is not to be dismissed at the outset as obviously unreasonable.⁵

§ 5. *The Form of Intuition*

At first sight Kant seems to use expressions like 'form of appearances', 'form of sensibility', 'form of intuition', and 'pure intuition', almost as if they were interchangeable.⁶ It is important to distinguish these from one another, even if in so doing we make Kant's exposition a little tidier than it actually is. We are here concerned with the meaning of these expressions, not with their justification or truth.]

* (Everything that appears to sense must be capable of being

¹ See Chapter VII § 2.

² B 146

³ A 41 = B 58; B 3.

⁴ See Chapters LII–LIII.

⁵ The fact that there is no physical organ of inner sense, as there is of the outer senses, is irrelevant. The characteristic of sense for Kant is not its relation to a physical organ, but simply its passivity.

⁶ A 20–2 = B 34–6.

ordered in spatial and temporal relations.¹ Space and time are the conditions of such ordering, and so are the conditions of the possibility of appearances. As such, space and time are *forms of appearances*.²

As forms of all appearances space and time are known to be necessary and universal. Hence we may say that our ideas of space and time are *a priori* or pure³—they cannot be dependent on experience or sense-perception, which can never give us strict universality or necessity. On Kant's theory such ideas must be due to the nature of the knowing mind, in this case to the nature of our sensibility. This implies further that the *content* of our ideas,⁴ namely space and time themselves, are due to the nature of our sensibility. They are forms under which alone we can sense appearances, and are necessarily imposed on appearances by the nature of our sensibility. This doctrine is expressed in the statement that space and time are *forms of sensibility*.⁵

On this view space and time are potentially present in our sensibility even before experience begins. I do not think Kant believes that space and time are actually present to our minds before experience begins.⁶ But the expression 'form of sensi-

¹ B 34; compare A 20. Such relations are 'outside' and 'beside' for space, and 'before' and 'after' for time. It is difficult to be sure whether Kant attaches any special meaning to 'capable of being ordered' (*geordnet werden kann*). This is peculiar to the second edition. It is perhaps possible that he is alluding vaguely to the necessity of synthesis in our apprehension of objects as spatially and temporally related.

² 'Appearances' is here used in a neutral sense. It is not yet implied that appearances are mind-dependent.

³ See B 3-4 and compare Chapter III § 2. In A 21 = B 34 ideas are said to be pure 'in the transcendental sense' when they contain nothing belonging to sensation. This takes into account the question of *origin*, but only in a negative way. The statement that such ideas are due to the nature of the mind is a further step.

⁴ As we saw above, Kant himself does not make this distinction, but speaks of space and time as *ideas*.

⁵ This definitely commits us to the subjective character and origin of space and time. The phrase 'form of appearance' does not so commit us, though when we think it out, it implies this conclusion. See A 26(b) = B 42(b).

⁶ Compare again A 452 n. = B 480 n.

bility' has a certain ambiguity. It may be applied, not to space and time, but to that characteristic of our sensibility in virtue of which we can sense things only in temporal and spatial relations. This characteristic does exist in every human being even before experience begins.¹

There is a clear distinction between 'form of appearance' and 'form of sensibility', the latter alone implying the subjectivity of space and time.

'Form of intuition' may be taken as equivalent to 'form of appearance', so far as 'intuition' is equivalent to 'appearance'. So far as 'intuition' means 'intuiting', 'form of intuition' is akin to 'form of sensibility' (or 'form of sense'); it has then the same subjective implication and the same ambiguity.²

Form is essentially the form of matter, and when we speak of space and time as 'forms', it is convenient to think of them as the *relations* in which our sensa are given. We might perhaps even say that they are the whole scheme or system of relations in which sensa are given.³ Sensa are given as outside and beside others, and before and after others. Space and time are the ultimate system of relations which make such particular relations possible. They are thus the *conditions* under which alone sensa can be ordered in such particular relations.⁴)

§ 6. *Pure Intuition*

When we separate the form from the matter, that is to say, when we abstract the spatial and temporal relations from the

¹ 'A form of sensibility', when used in this second meaning, is the source of space and time, but it ought not to be equated with space and time themselves. The ambiguity of this phrase obscures Kant's exposition, if it does not confuse his thought.

² In A 267 = B 323 the form of intuition is explicitly referred to as a subjective characteristic (*Beschaffenheit*) of sensibility.

³ The objection to this is that in the second edition (B 160 n.) Kant speaks as if the form had no unity. The unity of space and time comes from the synthetic activity of the mind. Compare A 99-100, B 137-8, etc.

⁴ Kant, it should be noted, habitually equates 'form' and 'condition'.

objects which stand in these relations, we have *pure intuition*. In spite of occasional ambiguities of language, Kant makes it clear that we obtain our intuitions of space and time by abstracting from sensible objects or by the elimination of sensible objects.¹ Space and time as forms of appearances are, as it were, embedded in given appearances. In pure intuition they are known in isolation, and they also acquire a unity which as mere forms they lack.² This unity is impossible without thought—but we are not concerned with thought in the Aesthetic.

The reason why Kant passes so easily from the form of intuition to pure intuition can now be seen. (*The form of intuition* is or contains³ the relations (or system of relations) in which appearances stand. *The content of pure intuition* is these same relations, abstracted from sensible appearances, and taken together as forming one individual whole. Space and time are at once the forms of appearances and the content of pure intuition. Indeed a necessary and universal form, if it is known by intuition, must be known by pure intuition; and a pure intuition, if it is to have any content, must find its content in pure form and not in sensible matter.)⁴

Kant makes his doctrine more difficult by saying, not that space and time are the contents of pure intuitions, but that they *are* pure intuitions. This phrase serves, like the phrase

¹ Note especially A 27 = B 43 and compare *Prol.* § 10 (IV 283). In A 20-1 = B 35 we get the pure intuition of space by leaving out of the idea of a body (1) what is implied by thought (substance, etc.) and (2) what belongs to sensation (colour, etc.). The same method is employed in B 5-6, and in A 22 = B 36 it is said to be the method of Transcendental Aesthetic itself. This is confirmed by the second argument in the Metaphysical Exposition (A 24 = B 38-9 and especially A 31 = B 46). For a very clear statement, see *Streitschrift* (VIII 240). ² B 160 n.

³ In B 67 the form is said to contain nothing but relations. 'Is' and 'contains' are habitually used by Kant as meaning the same thing.

⁴ Compare *Prol.* § 9 (IV 282) and § 10 (IV 283). The first passage implies that pure intuition must *contain* nothing but the form of sensibility, and the second that pure intuitions must *be* the forms of sensibility.

'form of sensibility', to indicate that space and time are mind-dependent.¹

Pure intuition is *pure* or *a priori*, because it eliminates the empirical element of sense, and contains only the necessary and universal relations in which sensible things appear. It should, however, be noted that space and time are not only necessary and universal conditions of experience. They have in themselves, even when abstracted from experience, a certain necessity and universality; for in knowing them we know, apart from experience, what all their parts must be. Our intuition of them is pure, inasmuch as it is intuition of a whole whose parts can be known independently of experience. This second sense is not clearly distinguished by Kant from the first sense.²

Pure intuition is *intuition* (and not conception), because it involves an immediate cognitive relation to an individual object³—there is only one space and one time.⁴

Pure intuition is said to contain an *a priori manifold*, a manifold which is not a manifold of sensa, but is given because of the nature of our sensibility.⁵ This manifold is composed only of relations (spatial and temporal).⁶ It is at once the content of pure intuition and the form of (empirical) intuition.⁷

¹ Nevertheless in the Metaphysical Expositions, where Kant proves that space and time are pure intuitions, he is not arguing that they are dependent on the mind, but only that they are known by pure intuition.

² We shall see later that these two senses are closely connected with one another. See Chapter VII § 4.

³ Space and time are objects only by courtesy. Compare A 291 = B 347.

⁴ Perhaps it is also intuition, because its content is the form of *sensible* appearances. It is bound up with our sensuous nature and is not (like the categories) a product of understanding alone. Compare Chapter VIII § 1.

⁵ Compare A 25 = B 39, A 77 = B 102, A 77 = B 103, A 99–100.

⁶ The word 'manifold' or 'manifoldness' is meant to indicate a multiplicity which in itself has no unity. Yet when we speak of 'a' manifold or multiplicity, the article 'a' suggests that unity which we wish to deny.

⁷ Compare B 136 n., B 137, B 160 n. In the last passage the form of intuition is said to give merely the manifold, while formal (or pure) intuition gives the unity of the idea.

Because space is a pure intuition, pure geometry is possible; because space is the form of intuition, pure geometry must apply to the sensible world.

Every part of space and time (and therefore every geometrical figure) is also a pure intuition.¹ It can be known in abstraction from given sensations.²

¹ Compare A 29.

² Geometrical figures can be constructed *a priori* in accordance with a concept, but the question of construction must be raised later.

CHAPTER V

SPACE AND TIME—THE METAPHYSICAL EXPOSITION

§ 1. *Kant's Question*

We are now in a better position to understand the central question of the *Aesthetic*. Kant believes that space and time are the necessary condition¹ under which alone objects can be given to our senses, and that they are due to the nature of our human sensibility. This has to be proved, and cannot be assumed. He therefore asks the general question 'What are space and time?'²

The question suggests three possibilities. Are they (1) real things?³ Or (2) are they only (inner) determinations⁴ or (outer) relations of real things—that is, of things-in-themselves? Or (3) do they belong only to the form of intuition, do they depend on the subjective constitution of the human mind? The first view was held by Newton, the second (or something like it) by Leibniz, and the third by Kant.

§ 2. *Metaphysical and Transcendental Expositions*

There is a difference in the order of exposition in the two editions of the *Kritik*. In the first Kant lumped all his arguments together. In the second he distinguishes two different methods of argument, and separates the Metaphysical from the Transcendental Exposition. He fails to carry this out consistently. In the case of time the transcendental argument is allowed to remain in the middle of the metaphysical argument,⁵ and

¹ B 29. He changed this from 'conditions' in A 15, but carelessly retains the plural in B 30 = A 16. The change is probably due to Kant's desire to connect space and time together as the condition under which all objects must be given. See Chapter VII § 1.

² A 23 = B 37.

³ *Wesen*.

⁴ 'Determinations' (*Bestimmungen*) are here contrasted with relations, but in other places they cover relations, e.g. in A 26 = B 42.

⁵ Argument 3.

transcendental considerations are retained at the end of the third metaphysical argument for space, and at the end of the fourth metaphysical argument for time.

A metaphysical exposition of an idea¹ analyses the idea by itself, and by analysis shows it to be given a priori.² A transcendental exposition of an idea exhibits it as a principle in the light of which the possibility of other synthetic a priori cognitions can be understood. It shows (1) that other synthetic a priori knowledge is derived from the idea, and (2) that such knowledge is possible only if the idea is explained in a particular way³ (namely as given a priori). In the present case synthetic a priori propositions (especially those of mathematics) are shown to be possible only if space and time are explained to be a priori intuitions.⁴

The Metaphysical and Transcendental Expositions of space and time are roughly parallel⁵ to the Metaphysical and Trans-

¹ B 38. The word '*Begriff*' is here (as frequently) applied to space and time, but '*Begriff*' strictly speaking is a concept, not an intuition. It is better to speak of space and time as 'ideas', for 'idea' (*Vorstellung*) covers both intuition and concept. '*Vorstellung*' means what is set before, or presented to, the mind.

² I take this to mean only that the idea, as necessary and universal, is not 'borrowed from', or dependent upon, experience. The positive statement of its origin must come later.

The use of the word 'metaphysical' in this connexion may possibly have suggested itself to Kant because he believed that the chief value of existing metaphysics consisted in analysis of concepts without any reference to the possibility of their objects. Compare A 5-6 = B 9-10.

³ B 40.

⁴ The Transcendental Exposition of space (though not of time) goes further, and 'explains' that space must be in the subject as a form of sensibility. Strictly speaking, a transcendental exposition ought to take into account the origin of the idea, but for the sake of simplicity it is better to reserve the question of origins for the 'conclusions'. In some ways the introduction of this distinction in the second edition disturbs the natural development of Kant's argument. There is also a certain awkwardness in speaking as if a part of the Aesthetic were transcendental in a special sense, when the whole argument of the Aesthetic is transcendental, as is indeed shown by its very name.

⁵ The parallel is a very rough one indeed, for both the Metaphysical and Transcendental Deductions deal with the *origin* of the categories,

cedental Deductions of the categories. Kant even speaks¹ of a transcendental *deduction* of space and time, but this would appear to cover the whole argument of the Aesthetic, including the 'Conclusions'.²

§ 3. *The Metaphysical Exposition*

In the Metaphysical Expositions Kant fails to maintain the precise parallelism between space and time at which he aims. There is no obvious reason for the variations introduced, and the parallelism is sufficiently close for us to consider the two expositions together.

(The Metaphysical Exposition falls into two parts. The first part is intended to prove that space and time are not empirical, but *a priori* ideas. The second part is intended to prove that space and time are intuitions, not concepts. Both together would then prove that space and time are *a priori* or pure intuitions.)

Kant's argument is complicated, and obscured, by the fact that he does not distinguish clearly between 'pure intuition' and 'form of intuition',³ nor between two different senses of '*a priori*' as applied to our ideas of space and time. (The first part is concerned primarily with space and time as forms of appearance (or forms of intuition). In it the doctrine that space and time are *a priori* ideas means that they are known to be universal and necessary conditions, or forms, of all possible appearances. In the second part, if there is any argument to show that space and time are not only intuitions, but and there are no 'Conclusions' distinct from the Deductions. The Metaphysical Deduction may, however, be said to consider the categories *in themselves*, and the Transcendental to consider them in their relation to *other* knowledge. Even this distinction must not be pressed too far either in regard to the categories or in regard to space and time. Compare also Chapter XI § 10.

¹ A 87 = B 119 and *Prol.* § 12 (IV 285).

² Kant's statement can have no reference to the distinction between a Metaphysical and a Transcendental Exposition, since in the first edition this distinction had not yet been made.

³ See, for example, the fourth argument in regard to time. A 31-2 = B 47.

pure intuitions—and Kant's language might suggest that there is—then 'pure' (or '*a priori*') is used to indicate that the parts of space and time are known only as limitations of the whole space and time.¹ This means that in knowing space and time we can know, without recourse to experience, what their parts (spaces and times) must be.)

There is in the Metaphysical Exposition only the argument that space and time are at once pure intuitions and necessary forms of appearances (or forms of intuition). The view that space and time have their origin in the mind, and that consequently things appear to us as different from what they are, in themselves—all this belongs to the 'Conclusions' drawn later, not to the Exposition itself.

§ 4. *Space and Time not Empirical but a priori Ideas*

The first part of the Metaphysical Exposition contains two arguments.

The first argument is the negative one that space and time are not empirical ideas, while the second argument maintains positively that space and time are *a priori* ideas.

The ideas of space and time cannot be 'derived'² or 'borrowed'³ from experience, because the ideas of space and time are presupposed by experience.⁴ If *sensa* are to be related to physical objects outside my body,⁵ and even if they are to be known as outside and beside, and before and after, one

¹ Compare Chapter IV § 6, where it is pointed out that intuition is pure in two senses. In both senses the word 'pure' (or '*a priori*') implies that our knowledge is independent of experience and has no sensible content.

² A 23 = B 38. '*abgezogen*'.

³ '*erborgt*'.

⁴ This does not mean that our ideas of space and time are necessarily explicit. They may be 'obscure' (*dunkel*), that is, not immediately present to consciousness. See Chapter XIX § 8.

⁵ Kant refers to sensible objects (not merely to *sensa*), although the nature of the sensible or phenomenal object has not yet been made clear. It should be noted that although all appearances (even those in dreams) are spatial and temporal, it is only objects (in the strict sense) which have a determinate position in one common time and space. This distinction is not made clear till later, and then not adequately.

another (as they must be in human experience)—then clearly space and time are already presupposed, whether we are aware of this or not.¹ To know² things (whether *sensa* or objects) as outside and beside one another is not merely to know qualitative differences in them:³ it is to know them as in different places, that is, in different parts of space. Similarly to know things as simultaneous or as successive is not merely to know qualitative differences in them: it is to know them as occurring in one and the same time or in different times, that is, in one part or in different parts (or moments) of time.

Kant's main argument is that the *particular* spatial and temporal relations in which *sensa* (and consequently objects) are given cannot be reduced to mere qualitative differences, and that space and time are presupposed as conditions of such particular relations.⁴ There may also be a suggestion that the ideas of space and time are not abstracted from given *sensa* (or objects) in the same way as empirical concepts of a common characteristic (like redness or colouredness) are abstracted.⁵ This subsidiary contention is by no means clear: it ought not to be interpreted as an assertion that we know space and time before experience begins.

So far Kant's position has been stated negatively—space

¹ Just as all thinking presupposes the law of non-contradiction, whether we are aware of this or not.

² Unfortunately English has no word corresponding exactly to '*vorstellen*', which may mean either to intuit or to think or to do both together and therefore to know. Hence unless we employ an un-English word like 'represent', we are compelled to make more definite what in German is left vague.

³ I take '*bloss verschieden*' in A 23 = B 38 to refer to qualitative differences.

⁴ Compare *Diss.* § 14, 5 (II 400): *Quod autem relationes attinet s. respectus quoscunque, quatenus sensibus sunt obvii, utrum nempe simul sint, an post se invicem, nihil aliud involvunt, nisi positus in tempore determinandos, vel in eodem ipsius puncto, vel diversis.* See also *op. cit.*, § 14, 1 and § 15 A (II 398–9 and 402).

⁵ For the different kinds of abstraction, see § 9 below. This suggestion touches upon the distinction between a concept and a pure intuition which is dealt with later. Our ideas of space and time are not merely concepts of common qualities, or common relationships, of spatial and temporal objects.

and time are not empirical ideas. We may state it positively by saying that space and time (as conditions of the spatial and temporal relations in which appearances must be given) are conditions of appearances. We cannot know appearances apart from space and time.

The second argument goes further and maintains that we can know space and time apart from appearances. The first argument by itself is not enough to establish the logical priority of space and time; for space and time might stand to appearances in a symmetrical relation, and appearances might be the condition of space and time just as much as space and time are the conditions of appearances.¹

Space and time are necessary and *a priori* ideas. The reason for this is that we can think away objects of experience from space and time, and still have space and time left; but if we try to think away space and time from objects of experience, we have nothing left.² It follows that space and time are not 'determinations'³ logically dependent upon appearances; they are the conditions of the possibility of appearances and are logically prior to them.

♣ (This argument has been much criticised in modern times, but Kant is trying to state something which is true.⁴

If we attempt to think of any object—whether we take as our example a colour, or an object proper such as a tree—if we try to think of it as having no spatial or temporal characteristics, it becomes nothing at all.⁵ It is more difficult to be sure

¹ For example in space-time space is the condition of time and time the condition of space, so that neither is prior to the other (Kant himself in such a case would probably speak of either as prior to the other). We shall see later that matter (or sensation) is as necessary to experience as form, but that this fact does not annul the distinction between form and matter or between the *a priori* and the empirical. See Chapter VII § 4.

² Kant states this argument more clearly for time than for space.

³ '*Bestimmungen*.' This word covers both internal qualities and external relations. I have sometimes translated it as 'characteristics'.

⁴ Compare Alexander, *Space, Time, and Deity*, Vol. I. p. 39.

⁵ Unless perhaps we regard it as an unknown thing-in-itself.

that we can have an idea of a space or time in which there are no objects. Yet even here, although a tree, if it is to be a tree, must occupy space and last through time, we could have space and time, and even this space and time, if this tree (or all trees) had never existed. (That is to say we can be aware of space and time apart from any individual object, though we cannot be aware of any individual object apart from space and time.)

Does Kant mean we can be aware of space and time apart from all objects of experience? Certainly we cannot *perceive*¹ empty time or empty space; he insists on this over and over again in the Analogies in regard to time,² and the same doctrine is set forth about space in the *Metaphysische Anfangsgründe der Naturwissenschaft*. (To perceive time and space, we must perceive things in time and space, and we get the ideas of absolute or empty time and space only by eliminating or thinking away objects in time and space.³)

Newton presumably believed that we could be aware in some sense of absolute space and time, and even that absolute space and time could be real things, apart from what is in them. This is not Kant's doctrine. What he holds is that in geometry we can study space as an individual thing in abstraction from the empirical objects in it, and that something similar is possible also in the case of time. We do so by constructing geometrical figures *a priori* in pure intuition,⁴ although these involve, and are even said to be, appearances present to the senses.⁵ We can also be aware of space and time as unique wholes, and say that space has three dimensions, while time has one;⁶ but even such fundamental principles would have no meaning (that is,

¹ 'wahrnehmen.'

² E.g. B 219. Compare also *Fortschritte der Metaphysik* (*Phil. Bib.* 46c, p. 103), a passage which deals with both time and space.


³ For a more elaborate account of our idea of absolute space, see *M.A.d.N.* 1. *Haupts. Erkl.* 1. *Anmerk.* 2 (IV 481).

⁴ B 137-8. The necessity for construction cannot be introduced into the Aesthetic by Kant, because it involves synthesis, and synthesis is reserved for discussion in the Analytic.

⁵ A 240 = B 299. Compare Chapter VII § 7 and also B 147.

⁶ Compare A 239 = B 299 and A 31 = B 47.

no objective reference), unless we could exhibit their meaning in relation to empirical objects;¹ and our idea of space or time would be a mere 'schema' apart from the activity of reproductive imagination in calling up objects of experience.² However much we can think of space or time as empty of any particular objects, there must be some sort of reference at least to possible objects; and we can know particular spaces and times only by knowing the objects which they contain.

In speaking of space and time as individual wholes we are passing to the second part of Kant's exposition, which is concerned with space and time as pure intuitions rather than as forms of appearances. But so far we can affirm Kant to be right in saying that (space and time have a unique status in experience; and this status is described not improperly in the assertion, that space and time are the necessary and universal conditions of the possibility of experience.) Apart from them the given manifold of appearance could not be arranged in those relations of outside and beside, and before and after, in which it always is arranged—and indeed must be arranged, if we are to have human experience at all. Space and time are thus the a priori forms of all appearances.³ 

§ 5. *Space and Time not Concepts but Intuitions*

The third and fourth arguments (in the case of time the fourth and fifth arguments)⁴ are directed to show that space and time are not concepts but intuitions.

¹ A 240 = B 299.

² A 156 = B 195.

³ It should be noted that Kant himself might have regarded the first two arguments, and especially the second—compare *Prolegomena* § 10 (IV 283)—as proving not that space and time are forms of appearances, but that they are pure intuitions. In that case, however, we must take pure intuition to mean primarily an intuition whose content is the form (or formal relations) in which all appearances are, and must be, given. In the later arguments pure intuition is considered in abstraction from appearances.

⁴ Where we deal with space and time together, it is simpler to suppose that the third argument on time has been removed to the *Transcendental Exposition*, and the fourth and fifth arguments renumbered.

A concept,¹ as we saw above,² is a *general* idea containing the common marks of different individual objects. An intuition is a *singular* or individual idea, that is, an idea of an individual object. I conceive triangularity, but I intuit this triangle.

The reasons why space and time are intuitions³ and not concepts are (the third argument) that space and time are one, and (the fourth argument) that space and time are infinite.

These two arguments are not sharply distinguished. Arguments used in connexion with the oneness of space are used also in connexion with the infinity of time.

§ 6. *Oneness of Space and Time*

(The first argument is simple. Different spaces are all parts of one space, and different times are all parts of one time. Space and time are therefore one and individual, and as such must be known primarily by intuition and not by conception.⁴)

In regard to space there is added a further argument, which must apply equally to time.⁵•

(We have spoken of different spaces as parts of one all-embracing space. It must not be thought that we know these

¹ *Log.* § 1 (IX 91). Kant objects to the phrase 'general concepts' (or 'common concepts'), because this applies to all concepts. Nevertheless he himself has to speak of a general or universal concept (spatiality) in connexion with space, because he sometimes uses the word 'concept' (*Begriff*) for the intuition of space.

² In Chapter IV § 2.

³ For the meaning of this, see Chapter IV § 2. It might be better to say that our 'ideas' of space and time are intuitions not concepts. Kant does say that the 'idea of space' is an intuition (B 40), but he also speaks of the 'idea time' (A 32 = B 48).

⁴ Kant, as usual, speaks of space, not as known by intuition, but as *itself* pure intuition (A 24-5 = B 39). In the case of time he says that the idea which can be given only through a single object is intuition (A 32 = B 47). Time itself he describes as a pure form of sensible intuition.

⁵ The beginning of this further argument may be regarded as merely expanding and explaining what is already said; but it may be taken to state a new point—that space is not only an individual whole of parts (which must be known by intuition), but also an individual whole which is logically prior to its parts (and therefore known by *pure* intuition)

different spaces, so to speak, in themselves, and that the all-embracing space is a mere aggregate of such different spaces. On the contrary, these different spaces must be thought of as *in* the one all-embracing space. They are known only as limitations of the one all-embracing space, which must be presupposed from the beginning.¹)

It is not so clear why this contention should lead to the conclusion that space is known primarily by intuition. This indeed follows from the fact that space is 'essentially one',² a whole which is logically prior to its parts; but there is a further point to be made (Kant is not denying that we have a concept of spatiality, a concept of the characteristics or 'marks' common to all different spaces, or, as he calls it, 'a *universal* concept of spaces in general'.³ His argument seems to be (1) that one common mark of the many different spaces is that they are necessarily limited; and (2) that consequently our concept of spatiality is derived from our immediate intuition of spaces as necessarily limited.⁴) The intuition of spaces as necessarily limited presupposes a pure intuition of one all-embracing space. Hence our concept of spatiality presupposes a pure intuition of one all-embracing space. In other words (one pure intuition of space must underlie all our concepts of spatiality.⁵

¹ I do not think that Kant means that we first know the all-embracing space, and then know the many spaces. I think he means that any given space is known as a part of a wider space, and that if we think this out, we shall find that every given space implies an all-embracing space of which it is a limitation. The all-embracing space is logically prior to the many spaces.

² '*wesentlich einig*.'

³ A 25 = B 39.

⁴ 'The manifold in space, and therefore the universal concept of spaces in general, rests only upon limitations.' The 'manifold' here is the pure manifold.

⁵ The fact that Kant uses 'space' both for individual space and for spatiality makes him difficult to follow. What I describe as concepts of spatiality are called in A 'concepts of *spaces*' (*denselben*), and in B 'concepts of *space*' (*demselben*). It is difficult to see why 'concepts' is used in the plural—perhaps because space has many common marks. It is also difficult to see the reason for the change made in B, since the concept is said immediately above to be a concept of *spaces* in general (as indeed must be the case if it rests on

(This second argument may be intended to show, not only that our knowledge of space is intuitive, but also that it is *a priori*.¹) If so, our knowledge is here shown to be *a priori*, not in the sense of being knowledge of the necessary conditions of appearances, but in the sense of being knowledge of a whole whose parts are known independently of experience.²

In this respect space as one whole of parts is on a different footing from such a whole as the totality of colours.³ The totality of colours is also an individual whole, but it is so only as a collection or aggregate of individual appearances with a common observed characteristic (colouredness); and it can be known only by completing the series of empirical intuitions of these appearances. (Space is a different kind of individual whole, such that knowing it we can say what its parts must be. Hence it is known by pure intuition, not by a series of empirical intuitions.⁴)

limitations). Perhaps the change was made through the proximity of the phrase '*in Ansehung seiner*' ('in regard to space').

Vaihinger (*Commentar*, ii, p. 223) takes Kant's argument to be that only in the case of intuition does the whole precede the parts; in the case of the concept the parts always precede the whole. But Kant does not here make this view of the concept explicit. The word '*Bestandteile*' is indeed used for the 'parts' of a concept in *Log. Einl.* V (IX 35), but it is not the usual technical term.

¹ It is possible that the third and fourth arguments of the Metaphysical Exposition are intended only to prove that space and time are intuitions. Kant certainly asserts as his conclusion that they are pure or *a priori* intuitions, but he may consider himself entitled to do so on the ground that he has already proved them to be pure or *a priori*. Nevertheless the second sense of '*a priori*' is so clearly implied in his arguments, and so important for his whole doctrine, that I prefer to make it explicit.

² They are known to be necessarily limited or finite.

³ By the totality of colours I mean, not the colour scale, but all the individual colours in the world.

⁴ We cannot even construct the colour scale *a priori* though perhaps we might fill small gaps in it (compare Hume, *Treatise*, Book I, Part I, Section 1); still less can we construct the totality of colours.

The fact that synthesis is necessary in order to know space must be examined later.

§ 7. *Infinity of Space and Time*

We have now to consider the arguments from the infinity of space and time.

(It is easy to see that the argument for the oneness of space is also an argument for its infinity, and it is so used in regard to time.)

The infinity of time is said to *mean* no more than this—that any determinate quantity (or part) of time is possible only as a limitation of the one all-inclusive time, which is presupposed.¹ As this is true of all quantities or parts of time, the original² idea of time³ must be given as unlimited, or as infinite in the sense indicated. That is to say, our idea of an all-inclusive time is logically prior to our intuitions of different times.)

The next step is intended to show that such an idea must be an intuition, not a concept. This would follow merely from the fact that time is one and individual, but Kant makes it follow here from the fact that time is infinite in the precise sense indicated.

¶ (The reason why it thus follows is stated differently in the two editions. In the first edition the idea of an all-inclusive time⁴ cannot be given through concepts,⁵ *because the parts of a concept are logically prior to the concept itself*. This is

¹ I take the phrase '*zum Grunde liegende*' to mean that the all-inclusive time is presupposed as a condition.

² A 32 = B 48. 'Original' (*ursprünglich*) is opposed to 'derivative' (*abgeleitet*). In B 72 'original' and 'derivative' are used in a special sense: the ideas of space and time are said to be 'derivative' and not 'original', that is, they are due to a dependent sensibility and not to a self-sufficient intellectual intuition. Compare *Metaphysik d. Sitten, Rechtslehre*, § 10 (VI 258) and *Streitschrift*, 1. Abschnitt (VIII 222-3) for further light on these terms.

³ Note that Kant himself says 'the idea time', not the 'idea of time'. As usual Kant's transition from time itself to the idea makes the argument difficult to follow. Our original idea of time is an idea of something infinite or unlimited, and this idea is presupposed by our intuitions of finite times.

⁴ Kant says 'the whole idea'.

⁵ Here again it is difficult to see why Kant refers to 'concepts' in the plural, unless it is because the concept of temporality contains different 'marks'.

withdrawn in the second edition, perhaps because the statement is not true of concepts of reason or Ideas.¹ The reason why the idea of an all-inclusive time cannot be given through concepts is (in the second edition) *because concepts contain only 'partial representations'.*²

Kant's argument is complicated by the fact that he assumes both time and parts of time to be our ideas.³ Our idea of the one all-inclusive time is, so to speak, an idea of all the times that there are—it contains all times as parts of itself: hence all finite individual times are parts of our idea of one all-inclusive time. If our idea were a concept, its parts could not be individual times (or lengths of time); for the parts of a concept are not the individual instances which fall under the concept, but simply the common characteristics, or common 'marks',⁴ which are found in the individual instances. Our idea of time must be an intuition, since its parts are individual times; and indeed it must be a pure intuition, for only so can it be the idea of an all-inclusive time whose parts (individual times) are known only as limitations of the whole.

(This intuition of an all-inclusive time is not only prior to our intuitions of different times: it is also prior to our concepts of temporality, our concepts of the characteristics or marks common to different times. As Kant says, it 'underlies' our concepts.⁵ The reason for this is presumably that already stated in connexion with the oneness of space. One common mark of different times is that they are necessarily limitations

¹ See *Log.* § 3 (IX 92).

² '*Teilvorstellungen*.' These seem to be identical with the '*Teilbegriffe*' and '*Partialvorstellungen*' of the lectures on Logic, and for the present purpose may be equated (as in A 43 = B 60) with '*Merkmale*', that is, with 'marks' (*notae*). See *Log. Einl.* VIII and §§ 1 and 7 (IX 58, 91, and 95). Compare also Chapter IX § 4.

³ At present this should not mean that they are *only* ideas.

⁴ The common characteristics or marks contained in the concept of temporality are, for example, continuity, homogeneity, unity of dimension, and perhaps limitation.

⁵ B 48. In the first edition he seems to say that it underlies 'our whole idea', whereas it really *is* our whole idea. The change from '*ihre*' to '*ihnen*' in B gives better sense.

of the one time, and our concept of temporality must be derived from our intuitions of times as necessarily limited. The intuition of times as necessarily limited presupposes a pure intuition of one all-inclusive time, and therefore this one pure intuition must underlie all our concepts of temporality.

¶ The arguments from the infinity of space are somewhat different, and are stated with greater clarity.

In the first edition Kant argued that a concept of spatiality, inasmuch as it is a concept of what is common to spaces of different sizes, cannot determine anything about quantity. The inference would appear to be that since infinity is a quantity, our knowledge of the infinity of space must be derived, not from the concept of spatiality, but from the intuition of space.¹

In the second edition Kant recognises that a concept can involve infinity, in the sense that it can be present in an infinite number of possible instances² as a common characteristic. That is to say, a concept can have an infinite number of instances under it, but it cannot have an infinite number of instances³ in it, as space has an infinite number of spaces in it. The general concept is spatiality, and although spatiality has an infinite number of instances (spaces) which fall under it, to speak of these spaces⁴ as in it would be ridiculous. We must not confuse our intuition of infinite space with the concept of spatiality.

¹ Noté, however, that it is only because of the absence of limits in the progress of our intuition that we obtain the principle of infinity.

² Kant says 'ideas', and this might suggest a reference to the 'partial representations' of A 32 = B 48. I doubt whether a concept can be said to be 'in' the 'partial representations' of which it is composed, whereas it is said to be contained 'in' the idea of the things which are known through it. See *Log.* § 7 (IX 95).

³ Here again I do not think Kant can refer to the 'partial representations' or 'marks' which are in a concept as its parts. It may be true that we cannot think an infinity of parts in a concept, but that is not the point. I am not even sure that it is true. If the 'marks' thought in an empirical concept are not infinite, at any rate we can always discover more of them in experience. See *Log.* § 103 (IX 141).

⁴ Or of spatial things.

It seems obvious enough that our idea of the one infinite space (or time) is to be distinguished from the concept of spatiality (or temporality), the concept of what is common to all spaces (or times); and if an idea of an individual is an intuition, while an idea of a common character is a concept, then our ideas of space and time must be intuitions. If this were the whole of Kant's contention, there would be no need to say more: but he is also arguing that the intuition of an all-inclusive space (or time) (1) is logically prior to intuitions of limited individual spaces (or times); and (2) is for this reason logically prior to concepts of spatiality (or temporality), which are derived by abstraction from such intuitions.

If we insist that our intuitions of space and time are paradoxical intuitions, and their objects paradoxical objects, Kant is willing to agree.¹ It cannot, however, be denied that we are in some sense aware of space and time as individual wholes, and there are at least plausible grounds for saying that we are aware of them as infinite wholes. To say this is, on Kant's view, to say that they are objects of intuition, and indeed objects of pure intuition,² since we know what all their parts must be.

Kant may have felt that there was more difficulty in regarding time as a pure intuition than in regarding space as such. Intuition is naturally thought of as an apprehension of the simultaneous, and the parts of space are simultaneous,³ while the parts of time are not.⁴ However that may be, he endeavours later to strengthen his argument that the idea of time is an intuition. He does so by maintaining that all temporal relations can be expressed in outer intuition, namely the intuition of an infinite line, provided we remember that the parts of an infinite line are simultaneous, while the parts of time are successive.⁵ Such an argument would seem to belong properly to the Metaphysical Exposition of Time.

¹ For example B 148; A 291 = B 347; B 457 n. In A 292 = B 348 space and time are said to be empty intuitions without an object.

² Or in Kant's language that they are pure intuitions.

³ B 40.

⁴ A 31 = B 47.

⁵ A 33 = B 50.

In the second edition Kant puts this contention even more strongly, and holds that all temporal relations *must* be expressed in outer intuitions.¹

§ 8. *Intuition and Conception*

✱ (That both intuition and conception are necessary for knowledge of any object is an essential doctrine of the Critical Philosophy. Kant has, however, said that our ideas of space and time are intuitions. Is not this a flat contradiction?)

We must remember that in the Aesthetic Kant is 'isolating' sensibility, but even so it should be abundantly clear that he is not denying the presence of concepts in our knowledge of space and time. He is only asserting that our concepts of spatiality and temporality are logically derivative, and that our pure intuitions of space and time are 'original'. As he himself says, space is '*intuitus, quem sequitur conceptus*'.²)

This doctrine has been sufficiently explained, but its full bearings are seen only when we understand how, according to Kant, the part played by intuition and conception varies in different kinds of cognition.³ In knowing a colour, the intuition is primary, the concept derivative; and this is true of all empirical concepts. In knowing a substance, although intuition is always necessary, it plays a secondary part: the concept of substance is primary and is independent of intuition. The same holds good of all the categories or pure concepts of the understanding.

Now the concept of spatiality must be a *pure* concept, because it is a concept of what is common to different *pure* intuitions. The unwary may suppose that it is therefore on the same level, and of the same nature, as a category. This is a mistake.⁴ The concept of spatiality resembles empirical concepts in being derivative and dependent, although unlike them

¹ See B 154, B 292.

² See passage quoted by Vaihinger, *Commentar*, ii, p. 233.

³ This can be fully understood only when we have grasped the distinction between different kinds of concepts. See Chapter IX § 5.

⁴ Compare *Prol.* § 8 (IV 282).

it is dependent on pure intuition. Our knowledge of space is primarily intuitive, and not intellectual. Whatever we may think of Kant's doctrine about the categories, as regards space and time he is surely right.

Furthermore, until Kant has explained his doctrine of synthesis, he has to speak as if the unity of space were *given* in intuition. It can, however, be given only because of a synthesis which does not belong to sense.¹ The necessary synthetic unity of space (and of time) depends upon, and presupposes, the pure categories of the understanding.² All this is omitted from the Aesthetic, but it seems to me that such an omission is defensible. A man cannot explain his whole philosophy at once.

It is much more difficult to defend the statement that space is 'represented' as an infinite *given* quantity.³ No doubt here also the fact of synthesis has to be ignored, though it is hinted at; for Kant speaks of the absence of limits in the advance of intuition as the source of our knowledge that space is infinite.⁴ Moreover the word 'represented'⁵ may cover either intuition or thought or both together, and a little later⁶ Kant says expressly that space is *thought* as containing an infinity of parts in it. In the case of time the meaning ascribed to 'infinity'⁷ avoids the suggestion that the infinite whole is given as complete:⁸ the 'infinity' of time *means* that any determinate quantity of time is possible only as a limitation of the whole, and on this statement the argument turns.⁹ I think also we are entitled to lay stress on Kant's insistence that our pure intuition of space (or time) *underlies*¹⁰ both our concepts of spatiality (or

¹ B 160 n. Compare B 130.

² B 161.

³ B 39. Compare A 25.

⁴ A 25.

⁵ 'vorgestellt.'

⁶ B 40.

⁷ A 32 = B 47-8.

⁸ Nevertheless the original idea of time is said to be *given* as unlimited.

⁹ Compare also Kant's own defence of his statement about space quoted by Vaihinger (*Commentar*, ii, p. 255). There he seems to reduce the infinity of space to the fact that all spaces are possible and thinkable only as parts of the one space. He even suggests that what is given is the *possibility* of all spaces, which goes *ad infinitum*.

¹⁰ 'zum Grunde liegt.'

temporality) and our empirical intuitions of spatial (or temporal) appearances. Infinite space and time are given to us, not as completed wholes, but as necessarily presupposed in our experience.

This I take to be the true doctrine which Kant is attempting to state. Nevertheless we cannot acquit him of carelessness in expression, and perhaps not even of confusion in thought. We must say, not only that infinite space and time are not given to us apart from the synthesis of the understanding, but that as completed wholes they are not given to us at all.¹ Kant himself speaks of absolute space elsewhere as a concept of reason, a mere Idea.²

Kant's statement, at the best, must be taken as provisional and liable to subsequent correction. At present we can maintain only that our knowledge of space and time as infinite depends primarily on our pure intuitions, the synthesis of which from their very nature can never be completed. For the purposes of the argument this is enough.

§ 9. *Different kinds of Abstraction*

I have said that we have pure intuition when we abstract the spatial and temporal relations from the objects which stand in these relations.³ This seems to me the natural way of speaking, but it will be noticed that Kant himself says only that we have pure intuition when we abstract from the objects.⁴ And this raises a point which must be made clear.

¹ In *K.d.U.* § 26 (V 254) Kant says it is the voice of reason which makes it inevitable that infinite space and time should be thought as wholly given (in the judgement of *common* reason). Does this imply that the statement in the Aesthetic is of a popular or provisional character? In any case it suggests that the word 'represented' should be taken as meaning 'thought'. We do think of space and time as infinite *given* quantities, though our pure intuition can never be a completed whole.

² *M.A.d.N.* (IV 559). Compare also *op. cit.* (IV 481). I am here presuming that the absolute space of the Newtonian physicist and the infinite space of the mathematician are to be identified. In his casual jottings (which cannot have the authority of a published work) Kant denies space to be a concept of reason. See *Nachlass* 4188 (XVII 450).

³ See § 3 above.

⁴ A 27 = B 43.

It is one of Kant's logical doctrines that we should never speak of 'abstracting something' but that we should speak only of 'abstracting from something'.¹ Thus when we think of the red colour of a piece of cloth, he is prepared to say that we abstract from the cloth, but not that we abstract the red colour from the cloth.

I do not think this point is of great importance for our present purposes. (What is of importance is that space and time are not abstracted from objects in the same way as red colour is abstracted.²)

Kant is prepared to say that red colour is given in roses and cinnabar, and is logically extracted, if not abstracted, from them.³ By this I take him to mean that by abstraction we ignore the differences in the given objects, and consider redness in separation as their common 'mark'.⁴ An idea thus abstracted from experience—to use the common idiom—is a concept and is not independent of experience.

If space and time were abstracted in this way, we should have merely the concepts of spatiality and temporality, and should have no ground for regarding them as independent of experience. For this reason Kant sometimes denies our ideas of space and time to be the results of abstraction.⁵ This, I take it, is the false doctrine of Leibniz which he repudiates. The whole point of Kant's doctrine is that our ideas of space and time are not concepts of the features or relations common to different sensible objects, such as their 'outsideness' or 'successiveness'. A thing can be outside another only if both things are in space. It can be after another only if both things are in time. In knowing space and time we are not abstracting, or extracting, the common relational qualities⁶ (if such a phrase

¹ See *Log.* § 6 (IX 95); *Anthr.* § 3 (VII 131).

² See *Streitschrift* (VIII 199 n.). Leibniz, according to Kant, thought they were; see A 40 = B 56–7.

³ When the idea of red colour is logically extracted or abstracted, it is used as a common 'mark', and so possesses universality. Compare *Anthr.* § 3 (VII 131). It is in short 'redness'.

⁴ Compare B 133 n.

⁵ See A 23 = B 38, A 30 = B 46, and compare *Diss.* § 15A (II 402).

⁶ Kant would call them 'marks'.

may be permitted) of things: we are leaving out or eliminating spatial and temporal objects;¹ and we are then left with space and time as individual wholes. These unique individual wholes we know to be infinite, and they are the condition of all such relational qualities as being outside and beside, or before and after.

✱ (This doctrine is of great importance. It shows that our intuitions of space and time are 'exhibited in their purity'² only by an act of abstraction following upon the perception of empirical objects;³ and it shows that the method of abstraction involved in such pure intuitions is different from the method of abstraction involved in conception.⁴)

¹ Compare A 20-1 = B 35, A 22 = B 36, A 24 = B 38-9, A 31 = B 46.

² Compare A 66 = B 91. To exhibit them in their purity is to extract them from experience as 'clear' ideas. See A 196 = B 241.

³ Compare A 196 = B 241 and A 292 = B 349. Also quotation in Vaihinger, *Commentar*, ii, p. 93 n.

⁴ It might be well to use a word such as 'isolation' or 'separation' for the special kind of abstraction involved in pure intuition. In B 427 Kant hints at such a usage, but he generally uses '*abstrahieren*' and '*absondern*' as practically synonymous. Compare *Log.* § 6 (IX 94).

CHAPTER VI

SPACE AND TIME—TRANSCENDENTAL EXPOSITION AND CONCLUSIONS

§ 1. *Transcendental Exposition of Space and Time*

In spite of its formidable name the Transcendental Exposition is comparatively simple. In regard to space it amounts to this, that the judgements of geometry are synthetic *a priori* judgements. In order to be synthetic they must rest upon intuition, and in order to be *a priori* they must rest upon pure intuition. We have already in the Metaphysical Exposition shown that space is a pure intuition. We now find that unless space were such a pure intuition,¹ geometrical judgements could not have the necessity and universality which they as a matter of fact have. Unless space were a pure intuition, we could not say that there is only one straight line between any two points,² nor could we say that space has only three dimensions.³ We could say only that so far as our experience went, we had found it to be so.

(A similar argument is used in regard to time, except that here we have no complete science comparable to geometry. We are simply referred to certain synthetic *a priori* principles of time relations, or axioms of time in general.⁴ Such axioms are 'Time has only one dimension'; 'Different times are not simultaneous but successive'.

A further argument is added in the second edition.⁵ Apart from time as an *a priori* intuition we could have no understanding of change (including motion, which is change of place). The understanding of change involves the attribution of contradictory predicates to the same subject, and this for

¹ That is, an object of pure intuition, though of a paradoxical kind. Compare B 160 n.

² A 24.

³ A 31 = B 47.

⁴ A 24; B 41.

⁵ B 48-9.

thinking by itself is impossible.¹ It becomes possible only when we realise that contradictory predicates can belong to the same thing at different times. Time is therefore the necessary and universal condition of our apprehending change and motion. It can be so only as a pure intuition, since thought by itself cannot supply such a condition.)

(Furthermore this view of our idea of time can alone explain the 'general doctrine of motion', which Kant regards as composed of synthetic *a priori* judgements.)

* [We have thus two contentions. Time must be pure intuition, firstly if we can know certain axioms about time itself, and secondly if we are to understand the concept of change and the general theory of motion.]

Kant is making an effort to discover a synthetic *a priori* science of time, corresponding to geometry as a science of space. There is no such science. Since time is one-dimensional, the science of time does not advance beyond such axioms as Kant has himself stated.

To remedy this he has to bring in change and motion, but change² and motion³ are not wholly free from empirical elements, and are not on the same footing as time and space. Furthermore the science of geometry takes account of space only, and not of time, whereas the doctrine of motion must take account of both space and time. Since time is the form of inner sense, a pure science of time should enable us to deal *a priori* with inner states (not with moving bodies), and should offer a basis for psychology rather than for physics.⁴

Nevertheless if time as a pure intuition is necessary to explain the axioms which Kant has propounded, we should perhaps be prepared to accept his doctrine of time, provided he could demonstrate that the corresponding view of space was necessary to geometry.

¹ The law of non-contradiction, as stated in Formal Logic, should have no reference to time. See A 152-3 = B 191-2 and compare Chapter XXXV § 2. ² B 3. ³ A 41 = B 58.

⁴ The precise nature of the 'doctrine of motion' is a further difficulty.

(So far the Transcendental Exposition is concerned to prove only that space and time are pure intuitions)—in the sense that knowing space and time we can say what their parts must be. For example, knowing space we can construct geometrical figures in it *a priori* in accordance with a concept,¹ and it is this which enables us to prove geometrical propositions. We have not yet maintained that pure geometry must apply to the actual world, and that therefore our pure intuition of space must contain the form of all appearances. Still less have we attempted to show that space must therefore be of subjective origin.²

Kant introduces both these points in the third paragraph of the Transcendental Exposition of Space.³ It may be argued that this ought to be done, if the exposition is to be strictly transcendental. The word 'transcendental' usually implies, not only that we show a cognition to be *a priori*, but also that we do so by ascribing its origin to the mind.⁴ Nevertheless these points are not introduced in the Transcendental Exposition of Time, and for the sake of clarity the subjectivity of space and time ought to be reserved for the 'Conclusions'.

The Transcendental Exposition as a whole is stronger in regard to space than in regard to time, for the temporal science parallel to geometry is, at the best, a trifle shadowy. It is for this reason that in the Aesthetic space is more prominent than time. The exact contrary is the case in the Analytic,

¹ *Proleg.* § 7 (IV 281). Kant properly does not himself talk of construction till he comes to the Analytic.

² I think it legitimate to use this phrase; compare 'subjective condition' in A 26 = B 42 and A 33 = B 49. Kant himself uses 'subjective origin' for the way in which the individual acquires a cognition. He uses 'objective origin' for the sources from which alone a cognition is possible, even although these sources are to be found in the human mind as such. See *Log. Einl.* III (IX 22).

³ B 41.

⁴ B 25; A 55-7 = B 80-1. Compare *Proleg.* § 13 *Anmerk.* III (IV 293): 'The word "transcendental" which with me never means a relation of our knowledge to things, but only to the faculty of knowledge. . . .'

though even there the tendency of Kant's thought in the second edition is to give space more prominence than it had in the first.)

§ 2. *Synthetic and Analytic Argument*

(Kant's argument may be looked at in two ways. He may be said to offer a justification of geometry by his theory of space as a pure intuition. He may also be said to justify his theory of space on the ground that it alone is consistent with the validity of geometry. The first type of argument Kant regarded as progressive or synthetic—it passes from the condition to the conditioned. The second type of argument he regarded as regressive or analytic—it passes from the conditioned to the condition.¹ Taken by itself the Transcendental Exposition belongs to the second type; but taken in conjunction with the Metaphysical Exposition it can be made to fit into an argument of the first type. The Metaphysical Exposition establishes Kant's theory of space by an examination of the idea of space itself: the Transcendental Exposition shows that the theory thus independently established is alone able to account for the possibility of geometrical science. Hence the argument as a whole can be said to move progressively or synthetically from the condition to the conditioned.²

§ 3. *Conclusions*

The Metaphysical and Transcendental Expositions, if they are successful, have established the principle that space and time are pure intuitions (in the sense of being known by pure intuition). These pure intuitions are for Kant the condition of all our *a priori* knowledge of space and time, including

¹ The distinction is as old as Euclid. See Pappus of Alexandria, *Collectio*, Book VII (Vol. II, p. 634 of the edition of Hultsch) and Heath, *A History of Greek Mathematics*, Vol. II, p. 400.

² Broadly speaking, the whole argument of the *Kritik* aims at being progressive, while the argument of the *Prolegomena* aims at being regressive. Compare *Prol. Vorw.* and § 4 (IV 263 and 274-5).

not only general axioms but detailed propositions—such as those of pure geometry. The content of these pure intuitions is the formal spatial and temporal relations in which all appearances must be given to us; or in Kant's language space and time are *forms of appearances*.

We have now to take a step forward, and to argue for the subjectivity, or transcendental ideality, of space and time. This transcendental ideality may be expressed by saying that space and time are *forms of our sensibility*—that they are due, not to the nature of the things which appear to sense, but to the nature of the human sensibility to which these things appear.

As usual, Kant fails to maintain an exact parallelism in his different accounts of space and time. This is partly due to carelessness, but partly also to the fact that the characteristics of time differ in certain ways from those of space.¹

(The argument may be put briefly. *A priori* knowledge²—knowledge, that is to say, which as necessary and universal is independent of experience—cannot be derived from experience.³ It must therefore be derived from the knowing mind. This means, for Kant, that whatever is known⁴ *a priori* cannot be given from the side of the thing known, but must be contributed by the mind itself.⁵ If we accept the view that space and time are known *a priori*, we must therefore hold that space and time are due to the nature of the mind, in this case to our sensibility.

¹ Conclusions (a) and (b) for space are roughly parallel to conclusion (a) for time, and conclusions (b) and (c) for time have (apart from the first sentence of (b)) no parallels under space.

² This covers knowledge in the full sense and also the intuitions or conceptions which are elements in such knowledge.

³ On the other hand, it could not arise apart from experience, and it is gradually sorted out from experience (or made 'clear' to the mind) by reflective analysis; see B 1-2.

⁴ Or conceived or intuited *a priori*.

⁵ Whatever is merely given in the thing known can, Kant believes, be known only as empirical fact. Since in knowledge there are only two factors present, the thing known and the knowing mind, what is known *a priori* must be given, not in the thing known, but in the mind which knows.

§ 4. *The Newtonian View*

Kant has already, it will be remembered, set forth three possibilities.¹ Space and time are either (1) real things, i.e. things-in-themselves, or (2) determinations or relations of real things, or (3) forms of our sensibility. The arguments used in regard to these three possibilities must be expounded briefly: criticism is reserved till later.

The first of these, which is the view of Newton, Kant does not take very seriously. He fails to mention it here in connexion with space.² In connexion with time he says only that if time were something existing by and for itself, it would then be something which without a real object would none the less be real.³ Clearly he regards time (and presumably space) as nothing apart from objects in time, although in thought we can eliminate sensible objects from it and cognise it in pure intuition.⁴ He says later that on the Newtonian hypothesis space and time would be two eternal and infinite self-subsistent nonentities or 'unthings' (*Undinge*), which are there—without anything real being there—merely in order to receive everything real into themselves.⁵ He adds that such a theory can account for the application of mathematical truths to the world of appearances—he does not say whether it could account also for the possibility of pure geometry—but that its upholders become embarrassed when understanding seeks to go beyond the world of appearances⁶ (This contention, not here explained, may perhaps be alluded to later, when he says that to make space and time forms of things-in-themselves is to make them conditions of all existence, including the existence of God.⁷

¹ A 23 = B 37. Compare Chapter V § 1.

² A 26 = B 42.

³ A 32 = B 49. Compare A 292 = B 349.

⁴ See Chapter V § 9.

⁵ A 39 = B 56. Compare B 70. An *Unding* is something the concept of which is self-contradictory; see A 292 = B 348. In A 291 = B 347, where Kant is stating his own view, space and time are not nonentities but imaginary entities. See also *Diss.* § 14, 6 (II 401).

⁶ A 40 = B 57. Compare Chapter VIII § 5.

⁷ B 71. This may be a reference to Spinoza, see *Metaphysik*, p. 37; or possibly to Malebranche, see *Diss.* § 22 *Scholion* (II 410).

A further criticism is to be found in the first two *Antinomies*.)

It can hardly be denied that in the Aesthetic Kant's criticism of this view is inadequate. He seems to take it as the view of physicists who have never thought out its metaphysical implications.¹

§ 5. *The Leibnizian View*

The view against which Kant's arguments are mainly directed is the Leibnizian view. In it space and time are relations of appearances, relations abstracted from experience and represented confusedly in abstraction;² indeed our whole sensibility is only the confused representation of real things.³

Kant argues later against making the difference between the sensible and the intelligible a mere logical difference between the confused and the distinct.⁴ It is on the contrary a transcendental difference, that is, one originating in different powers in the mind and implying a difference in the content.⁵ On this point I imagine few would support the Leibnizian view to-day.

In the passages referred to as 'Conclusions' Kant simplifies the Leibnizian view. Ignoring the doctrine of 'confusion', he takes this view to assert that space and time are characteristics of things independently of the subjective conditions of our intuition.⁶ In that case, he argues, our knowledge of space

¹ Compare *Diss.* § 14, 5 and § 15 D (II 400 and 403-4).

² A 40 = B 56-7. 'Relations' here would seem to be 'relationships' or relational qualities, and our ideas of space and time to be concepts of such common relational qualities.

³ A 43 = B 60; A 267 = B 323; A 276 = B 332. It would be better to say that our sensing is only a confused conceiving.

⁴ A 43 = B 60 ff.

⁵ A 44 = B 61-2.

⁶ This is the more general case of which the Leibnizian doctrine is a special form. 'Characteristics' or 'determinations' (*Bestimmungen*) include inner qualities and outer relations: in A 26 = B 42 the former are called absolute, and the latter relative, characteristics. In A 33 = B 49 this distinction is put awkwardly as a distinction between 'characteristic' and 'order'.

and time would be a mere generalisation from experience. We can make assertions about the characteristics of things-in-themselves, only so far as we have actually experienced the things.¹ Hence if space and time were characteristics of things-in-themselves, we could never attain the apodeictic certainty of mathematics, nor could we assert that the truths discovered in mathematics must hold of the real world.²

If this contention were sound, it would be fatal to the view that space and time are characteristics of things as they are in themselves. We must find some way of explaining why the physical world necessarily conforms to the discoveries of pure mathematics—provided always we are entitled to the assumption that it must so conform.

§ 6. *The Kantian View*

Kant's own view is 'that space and time are forms of human sensibility, that is to say, they are due to the nature of our sensibility. They are forms under which things must appear to us, not forms of things-in-themselves. What is given to sense still implies the reality of things-in-themselves; appearances are still appearances of things-in-themselves; yet the universal spatial and temporal relations of the given can be in no way due to things-in-themselves, but only to our sensibility. No doubt it must be due to something in things-in-themselves that we see one table as round and another as square;³ but if things-in-themselves are not spatial, this something cannot be roundness or squareness, and its real nature must be to us for ever unknown⁴. Things-in-themselves do

¹ A 26 = B 42; A 33 = B 49. Kant's doctrine is that since a characteristic (of whatever kind) is logically dependent upon the object of which it is the characteristic, it cannot be the condition of such an object; consequently we cannot intuit it except in so far as the object is given to us, that is, we cannot intuit it *a priori*.

² A 40 = B 57.

³ This view of Kant's doctrine is commonly denied, but it seems to me the only view which can make his theory intelligible. Compare § 8 below.

⁴ The real characteristics might conceivably be thoughts (A 359–60).

not migrate unchanged into our minds. As they appear to us, they become subject to the spatial and temporal forms of our sensibility. We know them only as they appear, and not as they are.

It should be clearly understood that Kant's main argument is not from the subjectivity of sensible appearances to the subjectivity of space and time as intimately bound up with sensible appearances.¹ It is precisely the reverse. Since space and time are known *a priori*, they must be subjective in origin, and therefore the sensible appearances of which they are the form must be partly determined by the nature of the mind. In the earlier stages of the argument we were entitled to keep open the possibility that these appearances were identical with things-in-themselves (or rather were the things-in-themselves, not only as they appear, but also as they are). That possibility is now, on Kant's principle, excluded; and henceforward when we say that space and time are forms of appearances, we imply that these appearances are things, not as they are in themselves, but only as they appear to us.

If we ignore the fact that Kant's argument is always from necessity and universality, we are bound to find it dogmatic and even incomprehensible. We may, for example, fall into the common mistake of supposing that his whole case rests on the unexamined assumption that relations, and especially spatial and temporal relations, cannot be given along with sensation.² On the contrary, Kant always assumes that *sensa* (and so objects) are always given to us in spatial and temporal relations, of which space and time are the conditions.³ This is, in fact, what he means when he says that space and time are forms of intuition or of appearances. His argument is

¹ In places (e.g. B 68) Kant does suggest independently that the senses can never give us the qualities of things-in-themselves, but this is rather a corroboration than a premise of his main argument.

² Even the combination of the manifold (though it belongs to understanding, not to sensibility) is given along with, although not in, intuition; see B 161.

³ Compare Lindsay, *Kant*, p. 67: 'Kant is putting space and time on the side of the *given*.'

not at all that relations as such must be due to the nature of the mind.¹ His argument is that space and time, as the *universal* and *necessary* system of relations which is the condition of the particular relations in which appearances are given, must be due to the nature of the mind. (More will be said on this point later on³.)

Kant believes that the difficulties which arise when we regard space and time either as things-in-themselves, or as characteristics of things-in-themselves, will disappear when we regard them as due to the nature of our sensibility. If we accept his hypothesis, 'it can be readily understood' both how the *form of appearances* can be given prior to all actual sense-perceptions, and also how we can have a *pure intuition* whose content is this form. The reason for this assertion is that our sensibility, our receptivity or capacity to be affected by objects, precedes all intuition of these objects.⁴

§ 7. Temporal Priority

Here our capacity to be affected by objects precedes in time all our actual intuitions. It may be argued that Kant must therefore have supposed our pure intuitions of space and time to precede all our actual sensuous intuitions. This is however admittedly false, not to say ludicrous, and it is

¹ In B 67 Kant suggests that through *mere relations* things-in-themselves cannot be known, but this is a quite different argument (and also a sound argument; see Chapter LIII § 4). It is in any case peculiar to the second edition.

² Kant indeed says that the form in which sensations are arranged cannot itself be sensation (A 20 = B 34); but he is referring (as is perfectly clear if we analyse his complicated assertion in detail), not to the *particular* relations (or empirical forms) in which sensations are arranged, but to the *universal* forms of space and time, which are the condition of all such particular relations or forms. The assertion, moreover, should not be taken as a premise of his argument, but rather as a provisional statement of his conclusions; compare Chapter IV § 2.

³ See § 8 below.

⁴ Compare conclusion (b) in regard to space (A 26 = B 42), and also the end of conclusion (a) in regard to time (A 33 = B 49).

explicitly rejected by Kant elsewhere,¹ so that it is not only the more charitable, but also, I think, the truer view, to suppose that in spite of his terminology he means nothing quite so crude. We can indeed say that any human being has, on Kant's theory, even before experience has begun, such a sensuous nature that all objects must appear to it in space and time. Since the phrase 'form of sensibility' is used ambiguously (not only for the form of appearances as due to the nature of our sensibility, but also for the nature of the sensibility to which this form is due),² we can even say that the form of sensibility (in the latter sense) precedes all experience. (But when we are told that pure intuition must be prior to all experience, we must take this to mean either that it is logically prior to experience, a condition of experience and not a generalisation from it; or else that we can have this pure intuition before any particular experience that we care to name.³)

Such an interpretation of Kant is in any case the only one which can have any chance of withstanding criticism. Whether it offers an easy solution of Kant's difficulties demands further examination than he has given it. There is always a danger in philosophy, as Kant himself recognises, that we may accept a disproof of our opponents' theories as a proof of our own.

§ 8. *Form and Matter*

Kant believes that it is possible to consider form and matter in abstraction from one another.⁴ In the Aesthetic he considers

¹ For example *Diss.* § 14, 5 and § 15 *Corollarium* (II 401 and 406); and again *Streitschrift* (VIII 221). I find it hard to believe that Kant could be perfectly clear on this point, both in 1770 and in 1790, and yet could talk nonsense about it in 1781. And indeed this nonsense is explicitly repudiated in A 292 = B 349.

² Compare Chapter IV § 5.

³ In *Prol.* § 7 (IV 281) the last clause '*vor aller Erfahrung oder einzelnen Wahrnehmung*' perhaps suggests that 'before all experience' is equivalent to 'before perceiving the individual object in question'. Compare the last sentence of the following subsection, 'How can intuition of the object precede the object itself?'

⁴ Compare A 20 = B 34.

the form of appearances (space and time) apart from the matter. In the Anticipations of Sense-perception¹ he may be said—though this requires qualification—to consider the matter in abstraction from the form.² The whole *Kritik of Pure Reason* may be described as an analysis of our experience into its formal and material elements. An analysis of this kind need not imply that we have first the matter and then the form, or first the form and then the matter; and I see no sufficient ground for attributing such a mistaken psychological theory to Kant.

This psychological interpretation of Kant is the source of many errors. It is, I think, the main source of the commonly accepted view that Kant took over Hume's doctrine of sensations as isolated and unrelated atomic entities. For this view I can find no sufficient evidence.³ Kant's psychology seems to me closely related to that of Baumgarten and Tetens, and in certain respects to that of Leibniz, rather than to that of Hume. It is obvious that if we abstract from the spatial and temporal form of intuition, what is left in intuition is sensation which can have no extensive quantity.⁴ It is equally obvious that if we abstract from the unity of intuition (which as universal is for Kant due to the mind), what is left will be a mere 'manifold' without unity. Kant certainly makes both these statements; but this does not justify the interpretation that we first of all acquire isolated sensations, and then impose upon them the forms of space and time.⁵

¹ A 166 ff., and B 207 ff.

² See A 167 = B 209 and A 175-6 = B 217-18.

³ Compare Lindsay, *Kant*, p. 15. This is a difficult question, and further points will be raised in Chapters XIX § 1, XLII § 1, and XLVI § 3.

⁴ Compare B 208.

⁵ In another connexion Kant says explicitly that empirical intuition is not compounded (*zusammengesetzt*) out of appearances and space (sense-perception and empty intuition). On the contrary, sense-perception and the intuition of space are conjoined (*verbunden*) only in one and the same empirical intuition as its matter and form. See A 429 n. = B 457 n. Although this is a note to the antithesis of the First Antinomy, it can, I think, be taken as expressing Kant's own

and the unity without which there would be no empirical objects.¹

This psychological interpretation has another result, which also appears to me to be erroneous. It is generally admitted that Kant offers no precise statement as to the reason why one object appears to us as square and another as round; but it is commonly held that all such differences of shape must be imposed *only* by the nature of our minds. The ground for this would seem to be that because space and time are for Kant imposed wholly by the mind, therefore squareness and circularity must be imposed wholly by the mind.² If *sensa* are not spatial, how can they be round or square?

This contention would be irresistible, if Kant supposed that sensations could really exist apart from space and time. If we refuse to accept such an interpretation, the argument loses its force. I believe that the empirical differences in the shapes and sizes of objects, like their empirical qualitative differences, must be ascribed to the 'influence' of things-in-themselves.

The commonly accepted doctrine destroys the distinction, upon which Kant always insists, between empirical and universal laws and between empirical and universal concepts.³ Only what is strictly universal is imposed by the mind upon objects.

view. Indeed what is the sense of talking about space and time as the conditions under which alone an object can be given, if what is given (namely sensation) is given quite independently of these conditions?

¹ As we shall see later, this view makes havoc of the Transcendental Deduction. Compare especially Chapter XXXI § 4.

² By parity of reasoning, since causality is wholly imposed by the mind, every particular causal connexion must be wholly imposed by the mind; but if so, it could be known *a priori*, whereas Kant always insists it must be discovered by experience. Similarly since degree is imposed wholly by the mind, every particular degree must be wholly imposed by the mind. On such a view sensations would be given without degree as well as without extension. Could absurdity further go? On my view, though causality and degree are imposed by the mind, every particular causal connexion and every particular degree is determined by the nature of things-in-themselves.

³ See, for example, B 165.

Empirical differences are particular determinations of the universal, but their particularity is not due to the mind and must be due to things.¹ If this view be given up, I do not see how the Critical Philosophy can be made intelligible.

It is true that Kant insists upon this point mainly in reference to the categories, but the same principle must hold for space and time. This is sufficiently brought out by Kant himself.² 'Empirical laws, as such, can never derive their origin from pure understanding, any more than the inexhaustible multiplicity of appearances can be adequately understood from the pure form of sensuous intuition.' This 'inexhaustible multiplicity' might be thought to be only the manifold differences in *quality* of sensation; but Kant goes on to say that all empirical laws are particular determinations of the pure laws of the understanding, just as all appearances are subject to the conditions of the pure form of sensibility, *whatever be the differences in their empirical form*.³ On the prevailing view when Kant says 'empirical form', he would have to mean 'matter'. It seems to me that he is referring (at least partly) to shape and perhaps size; and if this form is empirical, it must be known through sensation.

There can be no doubt that Kant distinguishes the mathematical triangle constructed in pure intuition from the empirical triangle, the concrete triangular object known through sense.⁴

¹ What is common to all objects is imposed by the mind. The differences in objects must be due to the nature of things. This is implied in B 69; see Chapter LIII § 7.

² See A 127-8.

³ A 128. Compare A 658 = B 686 for the continuity of 'forms' which are empirical and are distinct from the universal 'form' mentioned in A 653 = B 681. Other references to the empirical form or forms are to be found in A 20 = B 34 and A 110, though the term is not there used. In A 581 = B 609 'empirical form' is used in a different sense. There it seems to mean the universal form of objects of *experience*, which can be thought *a priori*. Compare 'the forms of all knowledge of objects' in A 129, where it is also called 'the intellectual form'.

⁴ Compare Vaihinger, *Commentar*, ii, p. 470.

'The figurative synthesis by which we construct a triangle in imagination is wholly identical with that which we exercise in the apprehension of an appearance in order to make for ourselves an empirical concept of it.'¹ This statement is not unambiguous, but I believe it to mean that in the apprehension of an empirical triangle we are compelled by the nature of our sensations to synthetise the given in the form of a triangle, such as can also be constructed *a priori*. In the *Kritik of Judgment* we are definitely told that 'in the apprehension of a given object of sense the imagination is bound to a determinate form of that object'; and that the object can give 'precisely such a form' as might be used by the imagination in a free synthesis.²

As we have already seen, Kant holds that we cannot *perceive* space apart from matter.³ He goes even farther than this and speaks of space—the space in which we perceive movements—as 'sensible',⁴ that is, as 'designated' or 'symbolised'⁵ through what can be sensed,⁶ and so as empirical. The same doctrine is implied by his continual references to the *empirical* determination of time.⁷ In abstraction from the forms of sensibility and the synthesis of the imagination, given *sensa* can have no spatial or temporal characteristics. Nevertheless they are given concretely under the forms of time and space, and are never given otherwise. Whatever be the part played by mind and by the thing-in-itself, *sensa* must be given in our experience

¹ A 224 = B 271. I have translated '*gänzlich einerlei*' as 'wholly identical'.

² *K.d.U.* § 22 *Anmerk.* (V 240-1). Compare also op. cit. §§ 17 and 21 (V 232 and 238). In § 17 Kant speaks of the forms (clearly the empirical or determinate forms) under which objects are given; and in § 21 he speaks of a given object bringing the imagination *by means of the senses* to a synthesis of the manifold. Note also that in A 167 = B 209 he says definitely that figure or shape, as well as quantity, is given *a posteriori* in experience.

³ See Chapter V §§ 4 and 8, and compare *M.A.d.N.* (IV 559), where this is explicitly stated.

⁴ '*empfindbar.*'

⁵ '*bezeichnet.*'

⁶ *M.A.d.N.* (IV 481).

⁷ See, for example, A 217 = B 264. In the *Streitschrift* (VIII 199 n.) he speaks of empirically determined time *and space*.

as outside and beside, before and after, one another;¹ they 'designate' the particular spaces and times which they occupy; they compel the imagination to synthetise them in certain empirical forms, which must accord with the universal and necessary forms of time and space; they are, in short, given concretely² (through the co-operation of things-in-themselves and human minds) as having certain shapes and sizes and as lasting for a certain time. This, I believe, is the basis of Kant's analysis of appearances into matter and form, and is in no way incompatible with this analysis.³

The interpretation which I have put forward does not imply that we know things-in-themselves. On any possible view we know that things-in-themselves are such that to human minds they appear as light and heavy. On my view we know also that things-in-themselves are such that to human minds they also appear as square and circular. There is no more difficulty in the one case than in the other, and neither view supposes that we know things as they are in themselves.

It is regrettable that Kant does not make his position so clear as to be beyond dispute. Nevertheless I submit that my interpretation alone can make the Critical doctrine reasonable and consistent, and that it has definite support in Kant's own

¹ In the *Dissertation*, § 14, 5' (II 400) in connexion with time, Kant speaks of '*relationes s. respectus quoscunque, quatenus sensibus sunt obvi*'.

² As I have said, if we abstract entirely from the contribution of the mind, the 'given' is a mere multiplicity. But this is an abstraction never found in reality. That which is concretely given in experience is due to the co-operation of things-in-themselves and the human mind. For the use of 'given', see B 130, B 134, B 161, B 163; also Chapter XXVIII § 10.

³ The importance which Kant attaches to empirical form and structure seems to me generally overlooked by modern commentators. It is all the more satisfactory to find this stressed by the Master of Balliol, Kant, pp. 65, 66, 105, 114. The doctrine I have maintained is, I think, supported by two passages he cites on p. 72, A 431 = B 459 and *M.A.d.N.* (IV 507 ll. 7-8). The first passage is as follows: 'Things, as appearances, determine space, that is, of all its possible predicates of magnitude and relation, they determine this or that particular one to belong to the real.'

statements.¹ (I believe that for Kant form and matter are separable only in thought, and that although the universal form is due to the nature of our minds, the particular form is determined by the thing-in-itself 'affecting' human minds.² It is at the very least worth while finding out how far this interpretation can explain the argument of the *Kritik* as it develops for the opposite interpretation attributes to Kant a view which is admittedly indefensible.)

§ 9. *Empirical Reality, Transcendental Ideality*

Kant sums up his doctrine in the phrase that space and time are empirically real, but transcendently ideal.³

To say that space and time are empirically real is to say that they are objectively valid so far as all sensuous experience is concerned.⁴ Spatial and temporal characteristics (with all that they imply) must necessarily belong to all objects of human experience, whether these objects be regarded as mere private *sensa*, or as the common objects which these private *sensa* reveal to us. If we consider the question from the point

¹ A detailed criticism of the alleged evidence on the other side would take up too much room. I would insist, however, that when Kant speaks of the form of appearance in A 20 = B 34, he means the universal form, which admittedly is imposed by the mind. The *universal* form is the one necessary condition of sensations being posited or arranged 'in a *certain* form', that is, in a determinate or empirical form. This distinction, which I think is also to be found in the *Dissertation*, must always be kept in view. The Critical argument rests always on the strict universality of the form, and to ignore this is to throw Kant's whole doctrine into confusion.

² A rough analogy may help to make this clearer. If we are wearing blue spectacles, the blueness of things is imposed by our spectacles, but differences in the shades of blueness are due, not to the nature of our spectacles, but to the influence of the things. Compare Chapters VIII §§ 2-3 and LIII §§ 7 and 9.

³ A 28 = B 44; A 35-6 = B 52. It should be noted that Kant later describes his whole philosophy as transcendental idealism but empirical realism, and opposes it to transcendental realism. See A 369 ff.; A 490 = B 518 ff.; *Prol.* § 13 *Anmerk.* III and § 49 (IV 293 and 337).

⁴ I use Kant's terminology. It would be better to say that the *ideas* of space and time are objectively valid.

of view of ordinary experience, all the objects of our experience are, and must be, in one common time and space.

To say that space and time are transcendently ideal is to say that they are nothing, if we cease to regard them as conditions of sensuous experience; we cannot class them with things-in-themselves either by regarding them as substances known through pure reason or by regarding them as determinations or relations of such substances.¹ In other words, from the transcendental point of view spatial and temporal characteristics belong *only* to objects of experience, not to things-in-themselves.²

* (By this doctrine Kant is able to avoid the disadvantages of the Newtonian view which makes space and time forms of things-in-themselves,³ and consequently conditions of all

¹ A 36 = B 52. As a result of his argument Kant is entitled to assume that if things-in-themselves are known at all, it must be not by sensibility but by pure reason. Compare A 28 = B 44.

² The statement that space and time are 'transcendently ideal' ought to mean that they are ideal when we regard them from the transcendental point of view, when we consider that (as universal and necessary) they must have their origin in the mind, and therefore are nothing apart from our sensibility, and cannot apply to things-in-themselves. I am not sure that Kant does not mean this—some of his statements support such an interpretation. Nevertheless he identifies 'absolute' and 'transcendental' reality (A 36 = B 53), and this presents a real difficulty. It might indeed be argued that a thing is transcendently real, that is, real from a transcendental point of view, when we ask whether its reality is due to the nature of the mind, and conclude that it is real independently of the nature of mind, and so absolutely real. But Kant may be unconsciously falling back on an older meaning of 'transcendental', and it is perhaps even possible that he may be confusing it with 'transcendent'. If so, his looseness of terminology is regrettable, but not of great importance. Only a very ingenuous kind of criticism will regard it as proving that this passage was written earlier, or even that it is the relic of an older view.

Similar difficulties have been raised about Kant's description of his philosophy as 'transcendental idealism'. It ought, however, to be observed that in two passages in the *Prolegomena* Kant asserts that this phrase is misunderstood, and that 'transcendental' in this connexion has nothing whatever to do with 'transcendent'; see *Prol.* § 13 *Anmerk.* III, and also *Anhang* (IV 293 and 373 n.).

³ B 71.

existence, even of the existence of God. He is also able to explain, as Leibniz could not, how pure mathematics¹ is possible, and how its results must necessarily apply to all objects of experience.²)

¹ Kant is concerned mainly with geometry.

² A 40-1 = B 57-8. Compare *Diss.* § 15 D (II 404).

CHAPTER VII

SPACE AND TIME—KANT'S ASSUMPTIONS

§ 1. *Universality of Space*

If space and time are to serve Kant's purposes, they ought to be universal and necessary conditions of *all* objects given to sense. It can hardly be maintained that Kant has shown space to be such a condition, and at the very outset we are met with difficulties. Space is said to be the condition of *outer* experience and of *outer* intuitions.¹ This assertion definitely restricts or limits the experience of which space is said to be the condition; and since 'outer' means 'spatial',² it looks like the tautologous statement that there can be no spatial experience apart from space.

Kant's statement is not really tautologous: (his contention is not merely that we cannot know spatial appearances apart from space, but also that we can know space apart from spatial appearances; and it is this double contention which entitles him to hold that space is the condition of outer experience.³) Nevertheless the fact remains that space is said to be the condition of some human experience, but not of all.

This seems to me to be a real difficulty, and one which involves Kant in continual embarrassment throughout the *Kritik*. There can, it is true, be universality and necessity with a limited application, as in geometrical propositions about triangles; and space may be said to be universal and necessary within its own sphere—the sphere of outer intuition. But the aim of Kant's whole discussion is to determine the necessary

¹ A 23-4 = B 38.

² I think it implies also that what is known is other than the knower.

³ Compare Chapter V § 4, and also § 5 below. Colour, for example, is not in the same sense the condition of coloured appearances; for although we cannot know coloured appearances apart from colour, we have no power of knowing colour apart from coloured appearances. Colour is simply a common property of coloured appearances, not an individual and intelligible whole which can be studied in abstraction.

conditions of *all* human experience; and although in the *Principles of the Understanding*, and especially in the *Analogies*, space is treated as such a necessary condition, this treatment is not justified by the argument of the *Aesthetic*.

There are indications, even in the first edition, that Kant was not wholly unconscious of this difficulty. There he asserts that space and time, *taken together*, are the pure forms of all sensible intuition;¹ and again that space and time are the necessary conditions of all (inner and outer) experience.² In the second edition he connects space more closely with time, and so makes it look more like a condition of all experience. The whole 'stuff' of our experience comes to us from outer sense.³ The consciousness of my own existence is at the same time an immediate consciousness of the existence of other things outside me.⁴ It is only through outer experience that inner experience is possible.⁵ We need not merely intuitions, but always outer intuitions, to show the objective reality of the categories.⁶ If we are to make inner changes thinkable, we must do so through outer intuition, representing time by means of a line, and the inner changes through the drawing of the line.⁷

¶ To make Kant's doctrine satisfactory we must recognise that space and time are ultimately bound up together, and that space is the mediate condition of inner, as well as the immediate condition of outer, experience. Kant's thought is tending in this direction, but—as is perhaps inevitable because of the time at which he wrote—his treatment of the subject, even in the second edition, is inadequate. It would be a natural development of Kant's doctrine to substitute a theory of space-time for separate theories of space and time; yet such a

¹ A 39 = B 56.

² A 49 = B 66. Kemp Smith omits brackets.

B XXXIX.n.; B 67. This stuff may, however, be only the matter for knowledge of physical objects. See Chapter IV § 2.

B 276.

⁵ B 277.

⁶ B 291.

B 292. Compare B 156 and also A 33 = B 50. The germ of this view is already present in the *Dissertation* of 1770, § 15 *Corollarium* (II 405).

substitution would create difficulties in regard to the nature of the mind. for the mind seems to last through time, but not to extend through space.

§ 2. *Universality of Time*

Similar difficulties might be raised in regard to time. (Time is the form of inner sense only,¹ that is, of the intuition of ourselves and of our inner states; and it cannot be a determination of outer appearances.²)

It seems reasonable enough to exclude our minds and inner states from space, but it looks paradoxical to exclude outer appearances from time. Why should time belong to inner states and not to bodies? Surely change, and therefore temporal position, are to be found in both alike. Motion is motion of bodies, and apart from space is impossible. As Kant himself says, it unites the two elements of space and time.³

His paradox is supported by the argument that time belongs neither to shape nor to position. It might be thought from this that Kant is considering only the characteristics which *necessarily* belong to everything so far as it is spatial. This restriction would exclude motion; for the concept of motion presupposes empirical perception of something movable, there being nothing movable in space considered in itself.⁴

Against this interpretation we have to set the statement that time cannot be outwardly intuited.⁵ The bald assertion that time cannot be a determination of outer appearances would seem to have been seriously meant.

Such a view is all the more curious because the whole argument of the Analogies turns upon the supposition that the objective time-order of events⁶ is distinct from the subjective time-order of our apprehension. In the Analogies, however, the objective time-order of events is determined by thought through

¹ A 33 = B 49.

² Compare also A 23 = B 37.

³ A 41 = B 58. In A 358 he even speaks as if motion were given to outer sense.

⁴ A 41 = B 58.

⁵ A 23 = B 37.

⁶ By 'events' Kant means primarily physical events.

the categories of substance, cause and effect, and interaction. This suggests that here Kant is confining himself to appearances so far as they are *immediately* intuited. All that is immediately given to us in time is the stream of our ideas or states of mind; and it is by thought, not by intuition, that we ascribe objective temporal position to moving bodies. Hence time is not an *immediate* determination of outer appearances.

If this is Kant's meaning, it is strange that he does not say so more explicitly.

In the third 'Conclusion' we get a little more light on this matter. There we are told that *all* appearances, that is, *all* objects of sense, are in time, and necessarily stand in time-relations.¹ Time is the formal *a priori* condition of *all* appearances.² If this is true, time has in human experience a universality which would save it from the difficulties raised above in regard to space.

The justification of this contention, and its reconciliation with the previous assertion, is left in some obscurity. Time, because it is the *immediate* condition of inner phenomena, is also the *mediate* condition of outer phenomena.³ The reason for this is that even our ideas of spatial things are, if we take them in themselves, determinations or states of our minds, and so necessarily in time.

This supports the view that Kant is not denying time to be a determination of outer appearances, but only denying it to be an *immediate* determination of outer appearances. He appears to hold that outer intuition as such gives us only the spatially extended. Our awareness of a changing spatial world

¹ A 34 = B 51. See also A 35 = B 52.

² A 34 = B 50. Compare *Dissertation*, § 15 *Corollarium* (II 405).

³ Kant also says (in A 34 = B 51) that by means of inner intuition we grasp also all outer intuitions in the mind. I take this to mean that if we are to be aware of outer intuitions (and certainly if we are to be aware of outer objects) we must be immediately conscious of these outer intuitions as present to the mind and so as events in our mental history. I see no reason to take Kant as meaning that we first of all are aware of our inner states and proceed to infer spatial objects.

would seem to be dependent on our awareness of outer intuitions as succeeding one another in our minds.¹

✚ Even so, the doctrine remains full of difficulties. Kant appears to be distinguishing, though by no means clearly, the immediately given content of outer intuition from the objects, namely bodies, to which the given content is referred. These objects he certainly regards as standing in time-relations, but the recognition of such objective time-relations is not an immediate intuition. It is the result of thinking, which alone can distinguish between our mental changes and an objective physical world; and this distinction is impossible apart from inner sense.

Kant's doctrine, if this interpretation is correct, can be understood only in the light of the Transcendental Deduction of the Categories. At present we can only note the reason given for the doctrine: time is the mediate condition of outer phenomena *because our ideas of spatial things are states of mind, and so must necessarily be in time.*² This seems to assume that because our ideas are in time, the objects to which they refer must also be in time.

If Kant's argument is to be valid, there must be an additional premise: that the ideas in question are appearances given to sense. If an appearance is given to sense, the immediate presence of an object is involved (as it is not when we are merely thinking). Hence we might maintain that if our ideas are *sensa* which come in temporal succession, the objects to which they refer must also be in time.³

(The 'object' in this argument must be the phenomenal object,⁴ since Kant would definitely reject any such contention as applied to things-in-themselves.) The complications in regard

¹ Since for Kant animals have only outer intuition and not inner, they must presumably have no consciousness of change. See Chapter LII § 1.

² The argument is stated at greater length in A 34 = B 50.

³ The qualities of these objects may be simultaneous, although they appear successively to us.

⁴ In A 34 = B 51 the objects are described as 'appearances' or 'objects of the senses'.

to the phenomenal object cannot be here unravelled, but if we consider the matter on a common-sense level, there is some plausibility in Kant's view. All we know immediately is the time at which an idea or sensum is given, and this is the same as the time of our apprehension.¹ We know immediately, for example, the time at which we see a star;² we do not know immediately the time at which it is where we see it to be. Yet the fact that we see it now implies that it is, or was, at some time.

No doubt, even as regards space, we must distinguish between the apparent shape and position of an object, which we grasp by immediate intuition,³ and the real shape and position, which can be grasped only by thought. Nevertheless even the apparent shape is the shape of what is intuited, not the shape of our intuiting. The case of time is different: what we know immediately is the time at which the intuition is given to us or becomes a state of our mind; and this is the time not of what is intuited, but of our intuiting.⁴ If this is true, time is properly described as the form of inner sense alone.

§ 3. *Universality of Space and Time*

The intimate connexion of space and time is not treated adequately from the side of time any more than it is from the side of space. If, however, we can accept the view that time is the immediate condition of inner appearances and the mediate condition of outer appearances, we have in the case of time that universality which is necessary to Kant's argument. If we

¹ Apprehension for Kant involves a present given intuition; see A 99; A 120; A 201 = B 246. Compare also A 190 = B 235. 'The appearances, in so far as they merely *quâ* ideas are objects of consciousness, are not in any way distinct from their apprehension.' I take this statement to refer primarily, if not entirely, to the *time* at which appearances are given and apprehended.

² That is, the time at which its colour is given or appears to us.

³ We need not deny that there is some thought, or at any rate some imagination, in this case.

⁴ No doubt the time of our intuiting, as we shall see in the second Analogy, may also be the time of what we intuit, if we are observing an objective change; but this we could never know by mere intuition.

can accept the further view—difficult as its implications are—that outer intuition is necessary for the apprehension of states of the self and of changes in these states, then we can say also that space is the immediate condition of outer appearances and the mediate condition of inner appearances. This would perhaps give us the required universality for space as well.¹

On this view space and time (both separately and together) would be the universal conditions of all appearances to sense (whether inner or outer). All appearances would be in one space and one time, or in one space-time.

§ 4. *Necessity of Space and Time*

Does the universality which we have now provisionally conceded to space and time involve also that necessity which is required if we are to regard them as known *a priori*?

We have to remember that something more than a matter of fact (or empirical) universality is demanded. Change, for example, is a universal feature of everything that we know, yet Kant regards it as derived from experience,² and not deducible from the idea of time.³

In a sense space and time are just ultimate facts which we cannot go behind.⁴ Kant's own line of thought does, however, suggest the possibility of finding some necessary connexion between them, which would leave us with one ultimate fact instead of two. Even apart from this possibility, he obviously regards them, not as characteristics which we *happen* to find everywhere in experience, but as necessary conditions of experience. Space and time are a fact, because experience is a fact: but they are not merely one of the many facts which we find in experience; they are the condition of all the other facts.

This problem of the relation between the condition and the conditioned is a difficult one, but Kant is clearly supposing

¹ Perhaps it would be necessary to go even further and regard mental states as in some sense spatial. Compare Professor Alexander's view in *Space, Time, and Deity*.

² B 3.

³ A 41 = B 58.

⁴ B 146.

that we understand space and time to be necessary to the kind of experience which human beings have.¹

When we consider any sensum—to take the simplest example—we understand (if we understand anything) that it must be given as outside and beside, and before and after, another. 'Outside' and 'beside' cannot be reduced to mere qualitative differences in the sensum, they mean 'in different places' or 'in different parts of space'. Similarly 'before' and 'after' cannot be reduced to qualitative differences in the sensum, they mean 'at different times'.²

Space and time are ultimate, and cannot be reduced to, or derived from, anything else. Kant is right in insisting on this point, and it is quite independent of any account of the psychological process by which we become aware of space and time.

It seems reasonable to hold that space and time are ultimate and necessary elements in human experience—we can conceive no human experience without them. But this might be said equally of sensation. Matter is just as necessary to experience as form,³ and we can no more have experience without sensation than we can have experience without space and time. What is the special kind of necessity which belongs to space and time,⁴ and not to sensation?

There is an important difference between the two cases. We can indeed say of sensation *a priori* that it must have a degree.⁴ Beyond this we can say nothing *a priori* of sensation: we must just wait for each sensation till it is given. Space and time, on the other hand, are such that we can say what their parts must be. They are, so to speak, necessary through and through, and there is nothing in them which is not necessary. We know not only *that* they must be in all experience, but

¹ A 23 = B 38.

² A 30 = B 46.

³ Compare the reference to the *material* conditions of experience (sensations) in A 218 = B 266. There is an interesting corroboration of this view (and of the inseparability of matter and form) in the *Opus Postumum*. See Vaihinger, *Commentar*, ii, pp. 68–9.

⁴ A 166; B 208. This might be called a formal characteristic of the matter of experience.

what they must be in all experience. This constitutes a real difference, which must not be exaggerated, but cannot be denied.

It is because of this special kind of necessity that Kant asserts space and time to be *a priori* ideas or intuitions. We have already noted that the term '*a priori*' is applied by Kant to space and time in two senses.¹ We now see that the two senses are bound up with one another. (Space and time are known *a priori*, firstly as wholes which necessarily determine the character of their parts, and secondly as necessary conditions of experience.² If they were not *a priori* ideas in the first sense, they would not be *a priori* ideas in the second sense.³)

*It is unfortunate that Kant does not sufficiently distinguish, and explicitly connect, these two senses, yet it is the real connection between them which is at the root of his ambiguous use of the term.

The conclusion of the whole matter would seem to be this. Space and time are necessary for Kant only in relation to human experience, but by this he means more than that we have never had an experience without them. He means also (1) that we cannot conceive experience without them; (2) that when we consider them in themselves (after eliminating in thought the objects with which they are filled), we can determine their nature through and through; and (3) that in this way we

¹ See, for example, the meaning of pure or *a priori* intuition in Chapter IV § 6.

² These two senses are bound up with the possibility of pure mathematics and the possibility of applying pure mathematics to the actual world. In saying that space and time are wholes which necessarily determine the character of their parts, I mean that in knowing space and time as wholes we know what their parts must be. They have thus what may be called an internal necessity as pure intuitions; and only so are we justified in regarding them as necessary forms or conditions of sensuous intuition. Compare Chapter XXX § 5.

³ Sensation, although necessary to experience, is not (in abstraction from experience) a whole which necessarily determines the character of its parts. Hence it can be known only by experience, that is, *a posteriori*. It is necessary to experience only as the matter (the empirical or conditioned element), not as the form (the *a priori* or conditioning element).

can determine, independently of experience, the spatial and temporal conditions to which all objects of experience must conform. If we were living in the eighteenth, or even the nineteenth, century, we should, I think, have little justification for denying these assumptions of Kant's subsequent argument.

‡ § 5. *Modern Mathematical Theory*

Unfortunately for Kant the development of modern mathematics, and of modern mathematical theory, casts grave doubt upon his assumptions in regard to geometry, and threatens, if it does not undermine, his position. This fact can be discussed profitably only by those who possess expert knowledge of modern mathematical philosophy; but it cannot be ignored without intellectual dishonesty, and some allusion must be made to it, even at the risk of displaying misunderstanding. A lucid and concise account of the new theories is given by Professor Stebbing in *A Modern Introduction to Logic*.¹ Although she there mentions earlier views of geometry, she ignores those of Kant.

According to the modern view mathematics now aims at so high a degree of generality and abstractness that it has ceased to have any essential connexion with quantity, and *a fortiori* with space. The result is that formal logic, mathematical theory, and pure mathematics, are all merged into an indivisible whole; and this whole is described as pursuing an analytical method.

It is not clear to me whether this theory is dealing with the same subject, or using words in the same sense, as Kant.

The logic which is said to be identical with mathematics is not the Formal Logic of Kant. Although it professes to deal only with pure forms (as did his), it brings in what he would regard as matter.² Furthermore the analysis which is spoken

¹ See especially Chapter X § 4 and Chapter XXIII § 4 of that work. An article in *Mind*, N.S. Vol. XXXVIII, No. 149, p. 1 (January 1929), by Professor Hardy can also be consulted with advantage. It mentions other theories than those prevailing in England, but it is hard to relate to the Kantian doctrine even those theories which insist on an element of intuition.

² See Chapter X § 4 of this book.

of is different from Kant's analysis; it is more than an analysis of concepts, and Kant seems to be right in denying that mathematics is a mere analysis of concepts. This fact is important for Kant's criticism of metaphysics, and it means that mathematical propositions are not analytic in his sense.¹

Again, the 'deductive development' discussed and created by the new theories is not primarily a method of producing conviction, nor is it a method of discovery,² nor is it even important as a method of proof.³ The method of analysis cannot be applied at all, except when a branch of mathematics has already developed a considerable way. As Kant is talking only of the method by which such a branch of mathematics, namely Euclidean geometry, has developed, it is difficult to see what is the relation between his statements and the modern theories. They seem to begin where he leaves off.

Nevertheless we must assume that the modern theories deny his main contention, that pure intuition is necessary for mathematics. 'Mathematics can be exhibited as a completely logical structure, so that no element of intuition enters into a mathematical proof'. (Curiously enough, the only intuition considered is empirical intuition, and the geometry of which Kant speaks is regarded as empirical geometry⁵—a hard saying, and one for which Miss Stebbing offers no reason.)

On the modern view a pure mathematical science is a deductive system which consists of primitive concepts, primitive propositions, and deductions from these.⁶ The primitive concepts are taken as undefined and intelligible without definition. The primitive propositions are assumed and not demonstrated.⁷

We have, however, to establish the consistency of our primi-

¹ If Mr. Bertrand Russell means to deny this when he says that mathematical propositions are 'tautologous generalisations' (*Mind*, N.S. Vol. XL, No. 160, p. 477), the inexpert can hardly but ask whether this assertion is due to a special insight into the nature of mathematics or to a logic which has lost its way.

² Stebbing, p. 463.

³ *Ibid.* p. 177.

⁴ *Ibid.* p. 463.

⁵ *Ibid.* p. 457.

⁶ *Ibid.* p. 458.

⁷ *Ibid.* p. 175.

tive propositions, and for this 'interpretation' is necessary.¹ Indeed apart from interpretation there can be no question either of consistency or of truth.² To interpret the undefined concepts is apparently to find objects for them,³ and indeed to find objects which fit into a system.⁴

(It is just this finding of objects, and of a system of objects,⁵ which Kant would consider to require the intuitional element necessary both to the truth and to the consistency of mathematics, and fatally lacking in the metaphysics which he set out to criticise.)

A further question I should like to ask is whether any system of objects does not in the last resort involve space and time. I should also like to ask whether this highly abstract mathematics, if it is to give us geometrical conclusions, must not be so interpreted that its objects are spatial figures which can, in Kant's language, be constructed *a priori* in pure intuition.

§ 6. Kant's View of Algebra

There is another point to be noted. Hitherto we have spoken of geometry, which is most prominent in the Aesthetic. Kant, however, believed that arithmetic and algebra also demanded intuition, and pure intuition. This is discussed on an elementary level and in inadequate detail, but he seems to be moving in the direction of that greater abstractness and generality which the modern theories demand, although he does not go so far as to escape from the idea of quantity.

Kant maintains⁶ that algebra constructs quantity (*quantitas*), not *quanta* as in geometry. It abstracts entirely from the character of the object which is to be thought under its concept of quantity, and chooses a notation for all constructions of

¹ Stebbing, p. 179.

² Ibid. p. 178.

³ Ibid. p. 179.

⁴ Ibid. p. 207.

⁵ If they fit into a system, I presume they must constitute a system.

⁶ A 717 = B 745. The meaning, and even the text, is in places uncertain. Compare also Chapter XXXVII § 8.

quantities¹ in general—that is to say, it uses signs for such operations as addition, subtraction, extraction of roots, and so on. It also uses signs² for the different relations involved in the concept of quantities³—I suppose such signs as =, <, >. The ‘quantities’ are presumably indicated by signs such as x , y , and z , and perhaps by numerals. Then—and this is the point—(it exhibits in intuition, in accordance with certain universal rules, every operation⁴ through which quantity is produced and altered.) Thus there is in algebra a symbolical construction, which, equally with the ostensive constructions of geometry, can give us results unattainable by mere analysis of concepts. This symbolical construction, or construction by means of signs,⁵ also involves intuition.

It is unfortunate that this is so obscure. Kant fails to make clear the nature of the intuition involved—it would seem to be primarily a pure intuition of time,⁶ and perhaps also of space.⁷ I mention the passage, not as offering a satisfactory account of algebra, but simply as showing that (for Kant the reduction of geometry to algebra does not mean that pure intuition ceases to be necessary.)

§ 7. *The Necessity of a priori Construction*

I do not know whether or not Kant is right in saying that algebra exhibits its *operations* in pure intuition, although I think that his doctrine deserves consideration. If we set this

¹ These ‘quantities’ or *quantitates* (if the word may be pardoned) are opposed to *quanta*: they are numbers as opposed to figures or durations; see A 724 = B 752. ² ‘bezeichnet.’

³ ‘The concept of quantities’ is presumably the same as the concept of ‘quantity’ or ‘quantitativeness’.

⁴ It is interesting to observe that the modern view regards the primitive concepts as symbols upon which we *operate* by means of the primitive propositions (Stebbing, p. 178).

⁵ Compare A 734 = B 762.

⁶ This view seems to rest on the ground that counting is always successive; see A 142–3 = B 182 and *Prol.* § 10 (IV 283). Some qualification of this is suggested in a letter to Schulz of November, 1788 (X 530). Compare also *K.d.U.* § 26 (V 251 ff.).

⁷ *Nachlass* 6314 (XVIII 616).

doctrine aside, and consider only Euclidean geometry, it is clear that Kant believed geometrical proof to depend throughout on intuition of spatial figures, whereas on the modern theory the intuitional element occurs only at the beginning, when we are establishing the consistency of our primitive propositions.

If we suppose the modern theory to give a true account of modern mathematical method, there is no reason why we should suppose that it therefore gives a true account of the method of Euclid. On the contrary, the method of Euclid is, it seems to me, explained correctly by the theory of Kant.¹ If we take the concept of triangularity, we can analyse it till we are blue in the face, but unless we construct a triangle in intuition, we shall never advance a step beyond our original definition of the concept; we shall never discover, for example, that the three interior angles are equal to two right angles.²

This does not mean that geometrical proof depends upon empirical intuition. How could the empirical intuition of one triangle give us, or even seem to give us, that apodeictic certainty which Euclid undoubtedly claims? We may be obliged to draw a triangle on paper in order to help our imagination, but we are not thinking about the seen triangle.³ We are thinking about a triangle whose characteristics are determined only by the principle of its construction. In Kant's language we are thinking about a triangle which we construct *a priori* in pure intuition in accordance with the concept. This language may possibly be naïve from the modern point of view. It is nevertheless expressive of a truth which may be in need of reinterpretation, but which cannot reasonably be ignored.

¹ I believe that Kant's theory is very closely akin to the theory of Plato. See *Republic*, 510d, and compare Aristotle, *Metaphysics*, A 6, 987b, 14 ff. See also Adam's edition of the *Republic*, Book VII, Appendix I.

² A 716 = B 744.

³ Or at least we are thinking about it, not as a seen triangle, but as having characteristics entirely determined by the principle of its construction. On these characteristics the whole proof depends. This is what Kant means when he speaks (A 240 = B 299) of figure as an appearance present to the senses, although created *a priori*.

I believe that the same doctrine holds in arithmetic, although there it is not so obvious. We can analyse the concepts of 7 and of 5 and of addition, but such analysis will never teach us that $7+5=12$, unless we construct the numbers in pure intuition. Here again we make use of empirical intuition to help us, but we are not thinking about the dots we put on paper, or the beads on the counting-board, with all their irrelevant and empirical characteristics.¹ We are thinking about numbers which we can construct *a priori* in pure intuition by adding unit to unit, and the characteristics of these numbers are determined only by the principle of their construction.²

✱ If we may summarise Kant's doctrine—all mathematical knowledge depends on the 'construction of concepts', by which he means exhibiting *a priori* the intuition corresponding to the concepts.³ For this purpose we may use empirical intuition; for example, we draw a triangle on paper. In so doing, however, we consider only the act of construction, to which much in the empirical figure is indifferent, as for example the size of the sides and angles. Since we can abstract from these, the individual figures can express the concept without impairing its universality. Mathematics deals with the universal as manifested or expressed in individual instances.⁴ This is something quite different from a mere analysis of concepts.

I am not unaware of the fact that I am treading upon treacherous ground, but I am convinced that whatever errors there may be in my contention, there would be a still greater error in supposing that there is no shadow of reason in the doctrine of Kant.

✱ § 8. *Modern Geometries*

A still more serious difficulty for Kant is the development of non-Euclidean geometries. Kant himself, when younger,

¹ B 15; A 240 = B 299.

² Compare the difference between λογιστική and ἀριθμητική (Plato, *Philebus*, 56 d, e).

³ A 713 = B 741.

⁴ A 713-4 = B 741-2.

had flirted with the idea that there might be different kinds of space with other dimensions, and had connected it with Leibniz's speculations in regard to a plurality of different worlds.¹ In the *Kritik* he assumes geometry to be Euclidean, and assumes also that Euclidean geometry is necessarily true of the physical world.

We are now told that there are different kinds of geometry and different kinds of space. Such a view is not in itself fatal to Kant's doctrine that our knowledge of space is *a priori*; for *a priori* knowledge may be acquired gradually and may at any stage be 'confused' or 'indistinct'.² The possibility of new mathematical concepts is certainly not excluded by Kant's theory,³ but on his suppositions every different kind of space would seem to imply a different kind of pure intuition. This view is difficult, if not impossible, unless there can be one fundamental intuition of space (or of space-time) such that all others are intelligible only in relation to it. It is hard indeed to believe that the different kinds of space are unconnected with one another; and if a set of propositions in one geometry can be replaced by a different, though corresponding, set of propositions in another geometry, there would seem to be some sort of underlying unity whose nature deserves investigation. Modern theory, so far as I understand it, denies that any one kind of space is more fundamental than any other. Above all it denies that Euclidean space is more real or fundamental than any other. If Kant's theory is to be maintained in a modern form, we should have to hold that there is a pure intuition

¹ *Gedanken von der wahren Schätzung der lebendigen Kräfte*, § 10 (I 24).

² For example, the analysis of given *a priori* concepts, such as categories, may be 'indistinct'. The concept may contain 'obscure' ideas which we pass over in our analysis, and we can never be certain that even the most careful analysis of such concepts is complete. See A 728 = B 756.

³ Mathematical concepts can be completely defined, but this is because they are 'arbitrary' inventions (which must, however, be compatible with the nature of space) and contain an arbitrary synthesis which admits of *a priori* construction. See A 729-30 = B 757-8, and compare Chapter IX § 5 for the 'arbitrariness' of such concepts.

of space-time in the light of which all the different geometries are intelligible.¹)

The difficulty of defending Kant's doctrine becomes even more acute, if only one of these geometries, and that not the Euclidean, applies to the actual space of the physical world.² On such a view it looks as if the application of geometry to the physical world is a purely empirical question. Nevertheless even in that case one of the pure geometries does apply to the physical world, and it seems to be assumed that one of them must so apply:³ we appeal to experience only to discover which. If one of the many geometries does apply, and still more if one must apply, to the physical world, we have Kant's problem before us in a more subtle form: it can hardly be a mere coincidence that some highly abstract system of geometry holds of the actual world; and it is the duty of philosophy to ask for an explanation. The same problem would arise in a form still closer to Kant's assumptions, if what we may call physical space could be interpreted in terms of all the different geometries, even if one were very much more convenient for the purpose than others.

It must be added that the advance of modern physics involves changes also in our views about time, but this does not necessarily imply that our knowledge of time is empirical, even although it is experience which has led us to make new discoveries. If the physicist still presupposes that we know something of what the parts of time must be to be parts of time, or even that we know something of what the parts of space-time must be to be parts of space-time; and if the philosopher can still say that all our ideas must be either simultaneous or successive; then time, like space, has still in some sense its doubly *a priori* character, and we need no more for the purposes of Kant's argument.

¹ Mr. Braithwaite seems to suggest that there is one absolute space-time; see *Mind*, N.S. Vol. XI., No. 160, p. 498.

² I understand that this view is no longer held by Einstein.

³ This need not mean that the same geometry must apply to every bit of space, but only that some kind of geometry must do so.

Kant's doctrine is altogether too simple in the light of modern discoveries. We must recognise that many propositions which he (and his contemporaries) were prepared to assert *a priori* of the actual world are definitely untrue. Above all we must recognise that no sufficient account of space and time can be given, if we isolate them from one another. For my own part, though I speak as the merest amateur in these matters, I do not see why it should be impossible to re-state Kant's assumptions so as to fit in with modern physical doctrine. It seems to me at least possible that space-time is the condition or form of all appearances given to sense; that we can gradually sort it out, by a special kind of abstraction, from the appearances of which it is the form, and study it mathematically as an individual whole which is intelligible through and through; and that in so doing we can discover laws to which the world of appearances must conform. Such suggestions are, however, hazardous and must be left to the expert. For the purpose of understanding Kant we must place ourselves at the point of view of the eighteenth century; and from that point of view I would urge that Kant's assumptions are, in the main, sound.

CHAPTER VIII

SPACE AND TIME—KANT'S CONCLUSIONS

§ 1. *The Connexion of Space and Time with Sensibility*

We must now assume, for the purposes of the argument, that our ideas of space and time are pure intuitions whose content is the necessary form of all appearances given to sense. This doctrine, as I have explained it, contains nothing to alarm even the most suspicious of realists; (yet Kant finds in it grounds for asserting that space and time are necessarily subjective in origin, due not to the nature of things, but to the nature of our sensibility)

There is no further argument to connect space and time with sensibility rather than with understanding. We must suppose the connexion with sensibility to be established by the previous arguments; but it is not altogether clear whether this connexion is proved by the fact that space and time are pure intuitions or by the fact that they are forms of sensible appearances.

It may be maintained that if space and time were connected with understanding, our ideas of them would (like the categories) be given as concepts originally, whereas Kant has argued that in their case the concept is derivative and the intuition original. If space and time are one and individual, our knowledge of them must be intuitive, and therefore it must be sensuous; for we have no power of intellectual intuition.¹

¹ It may be objected that intuition normally implies a real object given to sense by the 'influence' of things-in-themselves; and that since pure intuitions imply no such object, they might seem not to involve sense. It is hardly an answer to this objection, if we say that we could not acquire these pure intuitions or make them 'clear' to ourselves, unless our senses were affected; for the same is true of the categories, which do not originate in sense. Compare A 86 = B 118, A 96, and A 196 = B 241. The answer must, I think, be that our pure intuitions are connected with sense primarily because they contain the forms of sensible appearances, and in a lesser

It may also be maintained that the connexion with sensibility is shown by the fact that space and time are conditions of objects being given to sense, and not conditions of their being thought. We simply *see* red as extended, and so as spatial, while we *think* that it is a quality of a substance. Similarly we are immediately aware of *sensa* as before and after, while we *think* that events are connected as cause and effect.

There is no reason why we should not regard both these grounds as establishing the connexion of space and time with sensibility. We should have been grateful to Kant, if he had given a fuller treatment to this question, but on the whole he seems to have a good case. (If space and time are to be regarded as subjective in origin, it is reasonable to find their origin in sensibility rather than in understanding.)

§ 2. *The Subjectivity of Space and Time*

What are we to say of Kant's more fundamental doctrine that because space and time are known *a priori*, they must have a subjective origin?

In the first place we must be clear what the doctrine means. It does not mean that space and time are mental; for space at least is a predicate, not of the mind, but of things as they appear to us, that is, of objects of sensibility.¹ Even time is a condition of all appearances (inner and outer), and whatever Kant may mean by saying that it is not a determination of outer appearances,² there can be no doubt that for him all objects of the senses must be in time.³ The objects of the senses are, in his view, appearances of things whose character and existence is entirely independent of the nature of our minds. None the less the spatial and temporal characteristics

degree because only sense can give us what is individual. The reason why pure intuition has no real object is simply that its content is the form, not the matter, of given appearances.

¹ A 27 = B 43. When Kant speaks of space as a predicate, he must mean the general concept of spatiality.

² A 33 = B 49.

³ A 34 = B 51. This applies not only to *sensa*, but also to bodies.

of sensible objects belong (so far as we know) only to the things as they appear to us, not to them as they are in themselves. We human beings cannot apprehend things except as spatial and temporal, but we have no reason to believe that the things as they are in themselves are either spatial or temporal; for space and time are imposed on appearances by the nature of our sensibility.

It is impossible to invent any exact parallel for this revolutionary doctrine, but if we looked at everything through blue spectacles, we could say that the blueness of things, as they appeared to us, was due, not to the things, but to our spectacles. In that case the spectacles offer a very rough analogy to human sensibility in Kant's doctrine.¹

In the second place we must be clear about the nature of Kant's argument. His argument does not rest merely on the ground that we cannot conceive any experience except as spatial and temporal. It rests on what I have called the doubly *a priori* character of our ideas of space and time. Its ground is (1) that we can determine the nature of space and time through and through independently of experience; and (2) that in this way we can determine, independently of experience, the spatial and temporal conditions to which all objects of experience must conform.²

Kant's contention—however unpalatable it may seem at first sight—is that if things appeared to us just as they are in themselves, we could not legislate for them independently of experience. We could recognise that, so far as we had experienced them, they possessed certain characteristics, and we might anticipate that they would continue to do so. We could

¹ It may be noted incidentally that although the blueness of things would be imposed by our spectacles, (1) we should not first of all see things as non-blue, and then see them as blue; and (2) the differences in the shades of blueness would be due, not to our spectacles, but to things. These obvious facts may perhaps help to make clearer my contentions in regard to form and matter—see Chapter VI § 8.

² Compare Chapter VII § 4. All this is implied in the statement that space and time are pure intuitions whose content is the necessary form of appearances.

say, for example, that every triangle hitherto measured had its interior angles equal to two right angles; and we might expect other triangles to have the same characteristic, just as we might expect any swan we see to be white. But we could not assert that the interior angles of every triangle must be equal to two right angles, and that this law must necessarily apply to every triangle that we see. Still less could we work out a necessary system of geometry to which all experienced objects must conform.

✓ If we can determine the nature of space and time independently of experience and thereby legislate for all possible objects of experience, this can only be (according to Kant) because space and time are due to the nature of our sensibility. No other explanation can account for the fact that our abstract knowledge of space and time possesses apodeictic certainty and also applies to all objects of experience. Kant's theory is not merely possible or probable. It claims to be absolutely certain.¹

If space and time are due entirely to the nature of our sensibility, it is obvious that we can have no ground for suggesting that nevertheless they might *also* belong to things as they are in themselves. It is equally obvious that the empirical qualities revealed in our *sensa*, although they are due to the 'influence' of independent things, cannot be qualities of these things as they are in themselves; for such empirical qualities are necessarily spatial and temporal.² Indeed the latter point is hardly in need of argument, since the *sensa* vary from individual to individual (as the spatial and temporal characteristics when scientifically determined do not). This means that they depend partly upon something other than the thing of which they are the appearances.³

¹ A 48-9 = B 66.

² It seems meaningless to say that a thing-in-itself has a colour which neither extends through space nor lasts through time.

³ According to Kant, as I understand him, although differences in the secondary qualities (and also in shapes, sizes, and durations) depend on the nature of things-in-themselves, this does not imply

§ 3. *A Rough Analogy*

The precise character of Kant's view of space and time may perhaps be made clearer by contrasting it with the rough analogy of the blue spectacles suggested above. Suppose we were all born with something like blue spectacles on our eyes, how—it may be asked—could we determine whether the blueness of things really belonged to things-in-themselves or not?

We must assume for this purpose that our only sense is sight, so that the blueness of things is as universal as their spatial and temporal characteristics. We must also assume that it would be as impossible for us to imagine an object which was not some shade of blue as it is to imagine an object which does not occupy some space and last for some time. So far the cases are parallel, but there is nevertheless a fundamental difference between them.

We could recognise blueness as a common characteristic of all experienced objects; that is to say, we could have a concept of blueness: but if we had such a concept, what more could we do with it? There is no way of studying the necessary laws of blueness in abstraction, and thereby determining *a priori* the character of all possible objects.¹ Hence we could never have any ground for deciding whether blueness belonged to things in themselves or depended on the nature of our eyes.

that we have knowledge of things as they are in themselves. It implies only that we have knowledge of things as they appear to us.

We might indeed object that differences and likenesses in appearances must imply some sort of differences and likenesses in the thing, or things, that appear; but we have no means of knowing the respect in which things-in-themselves, or their qualities, differ from, or resemble, one another. We do not even know that there is a plurality of such things, or that things-in-themselves can have qualities, although we must think of them, by analogy, as a plurality and as having qualities. In such circumstances a statement of their differences and likenesses is too vague to convey positive meaning.

¹ We might indeed determine that the degrees of blueness are necessarily continuous, and that every object must have a degree of blueness. But in that case Kant holds, consistently, that the degree-ness (though not the blueness) must be imposed *a priori* by the nature of the mind. See the Anticipations of Sense-Perception.

This point may be put in another way. By abstraction we could think the concept of blueness, but we could never intuit the one infinite blue of which all blues are necessarily parts; yet unless we can do so, blue is not really analogous to space. Or if it be supposed that we could intuit the one infinite blue (on the ground that the only objection to this is the difficulty of intuiting the infinite, a difficulty which applies equally to space), then the intuition would be empirical. We could see no necessity why every blue area as such should be a part of a wider blue area. We could indeed see the necessity why every area should be part of a wider area, but this would have nothing to do with its blueness.¹ Our intuition of space would still be *a priori*; we could still determine the laws of space independently of experience, and thereby determine the laws governing all sensible objects. The intuition of blue would give us no such power, and we should have no sufficient ground for attributing it to the nature of our sensibility.

The status of space and time in experience is unique, and it is because of this unique status that Kant holds they must be attributed to the nature of the mind.

§ 4. *Subjectivity and Knowledge of Necessity*

Kant's Copernican revolution is intended to account for a necessity which we are assumed to know—the necessity that objects of experience should conform to the mathematical laws of time and space. Is it intended also to account for our knowledge of this necessity?

At first sight it would seem that there is no such intention. In the case of the categories Kant does indeed believe that by tracing them to their origin in the human understanding we make it possible to know what the categories must be. What reason produces entirely out of itself cannot be concealed,² and the 'clue' to the categories is to be found in the forms of

¹ The same criticism would apply to any argument that force, matter, or reality (which are supposed to fill the whole of space) must be known through pure intuition in the same way as space itself.

² A XX, etc.

judgement which are known *a priori* in Formal Logic. Nevertheless Kant does not regard the human mind as transparent in itself, or as more easily understood than the physical world.¹ He certainly does not believe our sensibility to be so transparent to reflexion that we can understand why it must involve the two factors of space and time.²

There is, however, a sense in which the Critical doctrine is put forward to explain our knowledge of necessity, and not merely to explain the necessity which we know. Kant, as I have insisted, is not arguing only that if space and time are due to the nature of our sensibility, this would explain why all objects must be spatial and temporal. Such a hypothesis would explain the assumed facts, but it could hardly be put forward as the only possible hypothesis.³ (The two-fold character of the argument ought never to be overlooked. What Kant is attempting to explain is why our abstract knowledge of the necessary characteristics of pure space and time should be *also* a knowledge of the laws to which objects of sense must conform. His contention is that such knowledge is possible only if the pure intuition by which we know space and time is due to the nature of our sensibility alone.⁴)

It can hardly be denied that Kant's doctrine offers a possible explanation of the facts, if we assume that these facts are

¹ He insists that even the sources of the Transcendental Dialectic (A 309 = B 366), the sources of mathematical knowledge (*Prol.* § 6 (IV 280)), and the schematism of the understanding (A 141 = B 180-1) are hidden deep in the human mind. Imagination is said to be a blind but indispensable function of the soul of which we are seldom conscious (A 78 = B 103). Compare also A 834 = B 862.

² Compare B 146. In this passage Kant appears even to deny that we understand why we must judge only through certain forms of judgement. This seems to be an overstatement of his case, but we have certainly no means of knowing the nature of our sensibility except by knowing the nature of its objects. Compare *Fortschritte der Metaphysik* (*Phil. Bib.* 46c, p. 92).

³ It would be parallel to the contention that a universal blueness must be due to the nature of our sensibility.

⁴ Compare also Chapter XXX §§ 6-7.

established by the previous Expositions, and in particular by the Metaphysical Exposition. The question to be decided is whether it offers the only possible explanation.

§ 5. *The Arguments against Leibniz and Newton*

The arguments by which Kant seeks to justify his 'Conclusions' consist largely of objections to the theories of Leibniz and Newton. This is natural enough, since his business is to dispose of alternative explanations; but there is always a danger, in this kind of argument, that some other real possibility may be overlooked.

Kant claims that if the doctrines he has set forth in the Expositions are true, they are incompatible with any doctrine of the Leibnizian type. If space and time are *forms or conditions of appearances*, and so of sensible objects, they cannot be mere characteristics¹ (whether qualities or relations) of such objects; for the object—at any rate if it is regarded as a thing-in-itself—is logically prior to its characteristics.² And if our ideas of space and time are 'originally' *pure intuitions*, they cannot be reduced to mere concepts (whether distinct or indistinct) of the common characteristics of things-in-themselves.³

These two arguments are not unconnected any more than the assumptions on which they rest are unconnected. Kant's entire theory rests on the view [that while we cannot know appearances apart from space and time, we can know space and time independently of experience, as wholes which neces-

¹ '*Bestimmungen*.' These may be taken to cover both qualities and relations as in A 26 = B 42, where qualities are referred to as absolute, and relations as relative, characteristics (or determinations).

² See A 26 = B 42 and A 33 = B 49. For the parenthesis, see also A 267 = B 323 and compare A 276 = B 332.

³ This argument is put less clearly in the 'Conclusions'. Kant insists merely that the characteristics of things, inasmuch as they are essentially dependent upon things, cannot be intuited *a priori*. We can conceive such characteristics only by an abstraction from empirical intuitions. For the argument against making the difference between the sensible and the intelligible a logical difference between the distinct and the indistinct, see A 43 = B 60 ff.

sarily determine the nature of their parts.¹ This is the ground of his contention that space and time (1) are the form, not the matter, of appearances,² and (2) are known by pure intuition. It is also the ultimate ground of his contention that space and time (1) cannot be mere characteristics of things, and (2) cannot be known by mere conception.

Furthermore, if Kant is right in holding that the judgements of geometry are synthetic *a priori* judgements, space and time must be known by pure intuition: the mere analysis of concepts—and we can do nothing with concepts except analyse them—could never give us such judgements.

I must confess that I find it extremely difficult to estimate the force of these arguments. Kant seems to me to be altogether sound in denying that intuitions, whether empirical or pure, can be reduced to indistinct concepts. I believe he is also sound in maintaining that our knowledge of space and time is primarily intuitional and not conceptual, and that we cannot regard the spatial and temporal characteristics of objects as on an equal footing with other characteristics.³ But the question arises whether we cannot abstract from observed objects the system (or systems) of relations in which they stand, and discover in such a system a necessity which must govern all objects standing in these relations. Or rather—since it is Kant's contention that we can do this in the case of space and time—why should we maintain that such knowledge of necessity is intelligible only on the supposition that the system of relations must itself be imposed on objects by the mind which knows them?

The question is the more pressing because modern logic, as I understand it, claims to abstract various systems of relation and to find in them a necessity which gives us *a priori* knowledge of all objects standing in these relations. Spatial and temporal relations then become only a species of a more

¹ By this I mean that we know the parts only as limitations of the whole, and that knowing the whole we know what the parts must be.

² See Chapter VII § 4.

³ The spatial and temporal characteristics seem to be relational characteristics and therefore so far distinct from qualities.

abstract system of relations which can be dealt with adequately and sufficiently by formal logic. Unless we hold that all relations as such must be imposed by the mind—and I do not think this is Kant's position—why should not spatial and temporal relations be real relations of things as they are in themselves? Why should we not be content to recognise that, granted certain relations, we can grasp a necessity in them as we cannot in mere qualities? And why should we seek to explain our knowledge of this necessity on the ground that whatever contains this necessity must be imposed by the mind?

To deal with these questions adequately would take me far beyond the limited purposes of this book. I would only say, provisionally, that I think Kant's doctrine has to be accepted or rejected in the light of the answer to these wider questions. This means definitely that, taken in themselves, his arguments are not so conclusive as he imagines. Nevertheless I am inclined to suspect, though I recognise this may be due to ignorance, that space and time cannot be reduced to a logical system of relations.¹ They look to me like individual wholes which are known by pure intuition, and this pure intuition seems to me, as it did to Kant, to underlie all our concepts of the relations which they contain. I am also inclined to suspect that space and time have a unique status in our experience, and that we shall make no progress in our philosophy till this essentially Kantian doctrine is recognised.

Kant is attempting to do justice to this unique nature of space and time, and only by recognising this can we appreciate his theory. He maintains that Leibniz failed to account for the essential individuality of space and time. We have no business to explain this away; and the only way in which we can uphold this essential individuality is to regard space and

¹ If, for example, we say that in an army there are various relations of subordination and co-ordination, then (setting aside the point that such relations always presuppose space) it is quite untrue to say that ordination stands to subordination and co-ordination as space stands to left and right or up and down. Ordination is merely a concept of common characteristics: space is an individual whole within which alone certain relations are possible.

time as individual wholes given to the mind (on the occasion of sense-perceptions) through the nature of our own sensibility. The alternative is to treat space and time as things-in-themselves, and this Newtonian doctrine Kant believes to be inconceivable.

When we turn to Kant's treatment of Newton, the fundamental question we must ask seems to be this: Granting that by means of our pure intuitions of space and time we can know *a priori* the conditions, or forms, of all appearances, why should not space and time be real things which are at the same time conditions, or forms, of things, not only as they appear to us, but as they are in themselves?

It is a weakness in Kant's argument that he pays too little attention to this possibility. If we set aside the theological objection—that such a view makes space and time the condition of God's existence¹—we are left with the plea that the theory is inconceivable, inasmuch as it is self-contradictory.² When Kant asserts that on the Newtonian hypothesis space and time are nonentities (*Undinge*), he implies that the very concept of them contradicts itself.³ He appears to consider this so obvious that it needs no argument in its defence. He may mean that space and time, taken as things, have the contradictory character of being systems of relations which relate nothing;⁴ or he may find their contradictory character in the puzzles connected with infinity which are dealt with in the first two Antinomies.

The Newtonian idea of absolute space and time is now generally abandoned, so that perhaps we need not be greatly

¹ This seems to assume the strict universality of space.

² The most important passages are A 39-40 = B 56-7 and B 70-1. The former passage is quoted in Chapter VI § 4. The latter passage maintains that on this view space and time must be two infinite things which are not substances, but which are also not anything which really inheres in substances (as a common quality or relation-ship), yet which exist, and are the necessary condition of the existence of all things, although they remain over when all existing things are cancelled or annulled (*aufgehoben*). Compare also A 32 = B 49 and A 292 = B 348.

³ A 292 = B 348.

⁴ See *Diss.* § 15 D (II 404) and compare A 285 = B 341.

perturbed by the slightness of Kant's argument against it. It might, however, be replaced by a hypothesis of the same type: namely, that space-time, although not absolute in the Newtonian sense, is nevertheless a real thing; and that the contradictions which Kant finds in the idea of space and time as real things are due to the treatment of space and time in isolation from one another, and therefore can be set aside.¹ (If any such hypothesis could be maintained, it would undermine Kant's whole position.)

Kant is in any case justified in saying to his opponents that they must think out clearly the doctrine which they put forward as an alternative to his. They must make up their minds whether space and time are to be regarded as self-existent entities, or whether they are merely the common qualities (relational or otherwise) of such entities; it is illegitimate to regard them now in one way and now in another, or to hover vaguely between both possibilities without committing oneself to either. And if our only choice lay between the doctrines of Kant and those of Newton or Leibniz, the doctrines of Kant would have a very strong claim upon our suffrage.

Nevertheless so far as Kant's argument rests upon the alleged impossibility of all other views, it must remain inconclusive, unless we are certain that the views examined are exhaustive. Negative evidence of this kind is a corroboration rather than a proof. What are we to say of the positive claims of Kant's doctrine itself? Do these hold independently of the view that the concept of space and time as real things is self-contradictory?

§ 6. *The Theory of Kant*

Kant habitually speaks as if his theory—that space and time are subjective in origin—followed inevitably from the doctrines established in the Expositions, and as if no other theory were compatible with these doctrines. It is not easy to see why this should be so, unless we hold that every theory of the Newtonian type is excluded as in itself too ridiculous

¹ This view is, I think, the view of Professor Alexander

for serious consideration.¹ If we do hold this, Kant's contention becomes much more obvious; and I am inclined to think that a supposition of this kind, though generally not made explicit, is always present in his arguments for the subjectivity of space and time.²

So far as I can discover, Kant nowhere asserts that the Newtonian doctrine is incompatible with the *Metaphysical* and *Transcendental Expositions*. He apparently admits that if space and time were real things, our knowledge of space and time would be *a priori* knowledge of objects in space and time.³ This may mean that the Newtonian theory is compatible both with the existence of pure mathematics and with its applicability to the physical world;⁴ and if so, it would also be compatible with the doctrine of the *Expositions*.

If we accept this conclusion,⁵ Kant's whole argument against Newton rests on the inconceivability of space and time as real things; and his claim—that only by the Copernican revolution can the doctrines of the *Expositions* be rendered intelligible—is directed solely against the philosophical theories of Leibniz, which at that time were dominant in Germany.

When Kant is understood in this way, the argument becomes much more plausible. Space and time cannot be real things,

¹ '*pertinet ad mundum fabulosum.*' See *Diss.* § 15 D (II 404).

² I think, for example, that it may be present in B 41.

³ In A 40 = B 57 Kant says that the supporters of the Newtonian hypothesis open up (*freimachen*) the field of appearances for mathematical propositions (*Behauptungen*). I take this to mean that they can account for the possibility of the application of mathematics to actual things. (The word '*freimachen*' is also used for 'franking' letters, which I suppose means making them free of the post.)

⁴ Such an interpretation seems to me to be supported, at least by implication, in *Diss.* § 15 D (II 404).

⁵ Kant can hardly believe that on the Newtonian view mathematical knowledge, although *a priori* in relation to physical things, would in itself be empirical. He suggests, rather curiously, in the *Fortschritte der Metaphysik* (*Phil. Bib.* 46c, p. 91), that if space were the form of the object as it is in itself, we should have to know it by an empirical *a priori* intuition; and (on p. 93) that our synthetic *a priori* judgements would be empirical and contingent, which is self-contradictory.

or independent substances, for this is inconceivable and self-contradictory: but equally they cannot be qualities or relations of real things; for if they were, they would be dependent upon the things, whereas we have seen that the things are dependent upon them. If we regard them as due to the nature of our sensibility, their inconceivability or self-contradiction is supposed to disappear; and it at once becomes intelligible how, although they can be known in abstraction from objects, they can nevertheless be the condition of objects—provided always that such objects are things as they appear, and must appear, to our sensibility, not things as they are in themselves.

This interpretation has the further merit that it gives us an argument from the logical priority, and not from the temporal priority, of our knowledge of space and time. As I have said, I think it rash to affirm that Kant ever confused logical and temporal priority;¹ and I do not believe that we need attribute to him anything so crude even in the Aesthetic, where his terminology is unhappily applied without explicit repudiation of a temporal meaning.² But even if we are convinced by the arguments, so strongly urged by Professor Prichard,³ which attribute this confusion to Kant, it is all-important to decide whether Kant's reasoning rests entirely upon this con-

¹ Chapter III § 3.

² Compare Chapter VI § 7. It is important to notice, not only that Kant expressly repudiates this doctrine of temporal priority elsewhere, but also that in works like the *Dissertation* and the *Streitschrift* where such repudiation is found, he continues to use expressions like 'before' and 'precedes', which suggest a temporal interpretation. Professor Prichard relies primarily on the *Prolegomena*, and it should be noted how in § 10 of that work Kant argues that because space and time *remain over* when we eliminate the empirical element, they are therefore pure intuitions, and therefore forms of sensibility which must *precede* all empirical intuition. The same combination of remaining over and so preceding is also to be found in the *Streitschrift* (VIII 240), and it suggests that to 'precede' does not mean to 'precede in time'. Compare also *Anthr.* § 7 *Anmerk.* (VII 141): 'The formal constitution of this receptivity cannot be borrowed from the senses, but must (as intuition) be given *a priori*, that is, it must be a sensuous intuition which *remains over* if everything empirical . . . is eliminated.' The italics are mine.

³ In *Kant's Theory of Knowledge*.

fusion, or whether his thought contains a deeper and more legitimate contention. For my own part I have no doubt whatever that it does; and it is this more legitimate contention which alone has any claim upon our consideration.

§ 7. *Human Experience*

Kant's arguments apply only to human experience, and he regards as conceivable a knowledge which depends, not on sensuous, but on intellectual, intuition.¹

Intellectual intuition would not, like sensuous intuition, depend on objects given to it from without: its objects would be given, or produced,² by the very act of intuition itself. Of such an intellectual intuition space and time would not be forms. They are forms of sensuous intuition alone. Hence if we conceive the divine mind as possessing intellectual intuition, the divine experience, if it can be called experience, would not be spatial or temporal.

Furthermore there might be other limited and dependent beings like ourselves whose experience was sensuous, but whose senses might be different from ours.³ For such beings space and time might or might not be the necessary forms of their sensuous intuitions. In this respect space and time differ from the categories, which (because they belong to pure understanding) would necessarily be involved⁴ in the experience of any rational being which depended upon any kind of sensuous intuition.⁵

Perhaps for the sake of completeness Kant ought to have asked whether we can have a non-spatial and non-temporal experience involving immediate intuition of an object. The

¹ B 71-2. Sensuous intuition is passive, intellectual intuition active.

² B 145. Compare B 72, B 135, B 139. This, I suppose, is the characteristic of *νόησις νοήσιω*.

³ That is to say, their sensibility would be passive, but they would be unaware of colours, sounds, and other human *sensa*.

⁴ This is true only of the unschematised categories.

⁵ B 148. Space and time, as confined to human experience, have a more limited universality and necessity than the categories (which are not so confined).

mystic's vision of God is sometimes described as if it were such an experience. Kant would presumably dismiss such a claim as mere *Schwärmerei*.

These speculations may seem unnecessary and artificial. Nevertheless they serve to bring out important aspects of Kant's doctrine. They confirm, for example, the view that we do not understand why sensibility as such should involve space and time. More important still, they show that the necessity of which Kant speaks is a necessity in relation to human experience. It is too often forgotten that Kant is consistently protesting against a metaphysic which claims by the exercise of pure reason to determine the necessary characteristics of ultimate reality. He is content with the humbler task of determining the element of necessity within human experience as such.

I do not think it a justifiable criticism to say that on this view everything is reduced to a mere matter of fact, and that the forms of human intuition might change. The latter supposition itself presupposes the form of time, and apart from so doing it is to us quite meaningless. And if we can know space and time independently of experience, and also understand how space and time are necessary to experience, not as its matter, but as its form or condition, it would be foolish not to admit that the facts of space and time, if we choose to call them so, are not on the same footing as the facts determined by mere observation.

Kant does not explain how we know that space and time are conditions of the experience of other men, nor even how we know that there are other men who have experiences. On a common-sense level we are, no doubt, entitled to assume both. The existence of other men is presupposed in our thought and action; and all our thinking, conspicuously scientific thinking, presupposes also a common world of spatio-temporal objects which we know. Nevertheless Kant's doctrine (that space and time are forms of appearances only) involves the consequence that we know ourselves as appearances only, and *a fortiori* that we know others as appearances only. Hence our

knowledge of other men and their experience demands from him a special discussion which it does not receive.¹

It may also be asked how we can know that the same space and time exist for different minds. Even if we assume that each mind comes to reality with similar forms of sensibility, would not this imply that each mind was aware of appearances in a similar, but different, space and time? This question Kant, so far as I know, has not raised. For my own part I find it difficult to understand what could be meant by saying that each of two men was aware of an infinite and homogeneous space (or time), but that nevertheless the spaces (or times) were different. I should have thought that here, if anywhere, the principle of the Identity of Indiscernibles was valid.

§ 8. *Space and Time in Relation to Things-in-themselves*

Are we entitled not only to assert that for us space and time must apply to all appearances, but also to deny that things-in-themselves are spatial or temporal?

Strictly speaking, we are entitled to say of things-in-themselves only that we do not, and cannot, know them to be in space and time. Since we do not know them at all, we cannot say what they are not. Nevertheless Kant habitually uses the stronger expression, and I have not scrupled to follow him in so doing.

If Kant's arguments are sound, the possibility that things-in-themselves might be spatial and temporal is an empty and ungrounded possibility, and one which could serve no useful purpose in our thinking. If we put on a pair of blue spectacles, it is possible (in default of other evidence) that at the same time the whole world really turns blue. It is also possible that the moon, as a thing-in-itself, is made of green cheese. The supposition that things-in-themselves might be spatial and temporal is of the same order. We are supposing it to be proved

¹ For the Kantian philosophy it is at least as necessary to justify our belief that there are other minds which are centres of thought and action as it is to justify our belief that there are permanent physical substances which are centres of force.

that space and time as known to us are entirely due to the nature of our sensibility. To insist that things-in-themselves might nevertheless be spatial and temporal, though we could never know them to be so, is to suggest the possibility of a pre-established harmony in which we have no reason whatever to believe, and which, if it existed, could make no conceivable difference to us.¹ To entertain groundless possibilities is no part of the work of philosophy, and Kant is not to be blamed for refusing to admit as a real possibility one which rests upon no positive grounds, but merely upon blank ignorance.²

(Strictly speaking, however, all Kant is doing is to set a limit. On this side of the limit are appearances which must be temporal and spatial. Beyond that limit are the things-in-themselves of whose characteristics we know, and can know, nothing.)

§ 9. *Time and Things-in-themselves*

If any positive grounds are brought forward in favour of the view that space and time characterise things-in-themselves, they must be considered on their merits. One argument of this sort is examined by Kant in relation to time.³

↓ (Change, it is urged, is real, even if the only change is change of our ideas; and since time is the condition of change, time must be real too.

Kant regards the answer to this as easy. Time is real, but only subjectively, only as the condition of human sensibility, or as the form of inner sense. That is to say, human sensibility is such that I must be aware of my inner states as a succession of changing events in time. If there were an intuition other than sensuous, such intuition might, and he believes would, apprehend without any reference to time, and consequently without any reference to change, the very characteristics of the mind which we intuit as changes. Time like space depends,

¹ Compare B 166-7.

² In A 388 a Critical objection is said to show that a contention is groundless, not that it is wrong (we can show the latter only by knowing the object).

³ A 36-8 = B 53-5.

not on the nature of the thing-in-itself, but on the nature of the knowing subject. It is empirically real, and has under it necessarily all appearances of myself to myself. But this implies no absolute reality either of time or of change.

In a footnote he gets nearer to the real objection. There he admits we can say that our ideas follow one another, but this for him means merely that we are aware of them as in temporal succession—the temporal succession being due, as always, to the nature of our sensibility.

Even this hardly faces what seems to me the real point of the argument. Kant takes the contention to be that we are aware of our ideas (or inner states) as changing in time, and he has no difficulty in showing that we are equally aware of external objects as in space. Space and time are on precisely the same footing, and if one is only the form of appearances, so also is the other. The objector does not, however, mean merely that he is aware of his ideas, or inner states, as in time. He means that his awareness is also in time, or is also a temporal succession.¹ His contention is that time has a very special reality, because it is implied, not merely in what he is aware of, but in his awareness of it. What he is aware of may be mere appearance: his awareness of it cannot be mere appearance, but must be absolute reality. And if this is so, time must be, not merely empirically, but absolutely, real.

I presume Kant would reply that this contention is an error. When we say that our awareness is in time, we can say so, only if we are aware of our awareness, aware, that is to say, of a succession in our ideas. And if we ask whether our awareness of our awareness is not also in time, we embark upon an infinite regress, at any stage of which Kant would presumably give the same answer.

It should be added that when Kant denies that things-in-themselves are changing, he does not mean to assert that they are permanent and unchanging. Change and permanence

¹ I take this to be the real point of the objections raised by Lambert, Sulzer, Mendelssohn, and Schulz; see *Briefwechsel* (X 102, 107, and 110-11) and Vaihinger, *Commentar*, ii, pp. 400-1.

alike presuppose time, and Kant denies that we can justifiably attribute any kind of temporal characteristics to things-in-themselves.

§ 10. *Value of Kant's Argument*

It is not unreasonable to suppose that Kant, under the influence of Leibniz, continued to regard reality as composed of monads,¹ although he became convinced that the proofs advanced by Leibniz were fallacious,² and indeed that knowledge of ultimate reality is unattainable by man.

If we assume some such belief to be at the back of Kant's mind, it must be remembered that for Kant the conception of the monad has altered. His monads are not self-sufficient, and there is some sort of contact between the knower and the known. If the mind of man is a monad, it is not a windowless monad, but looks out through its windows at reality. Its windows, however, are not of transparent glass. As coloured glass imposes its colour on the objects seen, so the windows of our mind impose upon all objects sensed the forms of time and space, and it is only through these windows that we can be conscious even of ourselves.

*I cannot think that such a view is to be rejected as an impossible or self-contradictory hypothesis, or that the arguments urged in its support can be set aside as negligible. The transcendental ideality of space and time has indeed the appearance of paradox; it is as repugnant to believers in common sense as it is attractive to those who look upon the physical world as a veil which partly conceals and partly reveals a deeper spiritual reality; but I do not see that its paradoxical character is sufficient to warrant its rejection. Nevertheless Kant's position, as it stands, cannot be said to have that demonstrative certainty to which he lays claim;³ it is rather in need of that clarification and defence for which he begs.⁴ Such attempts at clarification and defence may lead

¹ Compare A 359-60.

² The Amphiboly of the Concepts of Reflexion (A 260 = B 316 ff.).

³ A 48-9 = B 66.

⁴ B XLIII-XLIV.

to new philosophies in the future, as they have done in the past.

The discussion of space and time, it must be remembered,⁽¹⁾ is the first of the three main arguments by which Kant seeks to establish his transcendental idealism—the other two being⁽¹⁾ the Transcendental Deduction of the Categories and the Antinomies. No final judgement can be passed on any part, until his philosophy has been understood as a whole. For purposes of exposition we must assume that his central doctrines in the Aesthetic have been proved.

BOOK III

FORMAL AND TRANSCENDENTAL
LOGIC

CHAPTER IX

FORMAL LOGIC

§ 1. *Formal Logic*

Kant believed, as did most philosophers before the nineteenth century, that Formal Logic (or, as he called it, General Logic) was a science as certain as mathematics. It differed from mathematics in being a completed science.) All the additions made to it since the time of Aristotle were, at the best, contributions to the elegance of the subject, not to its certainty: too often they were discussions illegitimately introduced from other sciences such as metaphysics and psychology.¹

(The reason for the unique success and completeness of Formal Logic is the limitation of its subject-matter. Formal Logic is concerned only with the necessary laws of thought, which hold whatever be the nature of the objects thought about. It recognises that thought has an object, and it may be said to apply to all objects in general;² but it abstracts entirely from the character of the objects, and from all differences between them. Hence it is able to state the formal rules of all thinking, and to ignore the matter—that is, the content—of thought. For this reason it is a truly general logic; and in its understanding, as the faculty of thinking, is concerned only with itself and its own form.³)

Differences in the objects about which we think produce differences in our thinking.⁴ Mathematical thinking, for example, differs in certain respects from biological thinking. If we had a logic of mathematical thinking, it would contain the rules for thinking rightly about a particular class of objects. As such, it would be no longer formal or, in Kant's language, general. It would be a special (or particular) logic dealing with a special (or particular) use of thought.⁵

Again, there are certain empirical conditions under which

¹ B VIII.

² *Log. Einl.* I (IX 16).

³ B IX.

⁴ Compare B VIII.

⁵ A 52 = B 76.

our thought is exercised. It is important to study such questions as the influence of sense, the play of imagination, the laws of memory, the nature of attention, doubt, scruple, conviction, and so on; and also the sources of error, and the part played by inclination or habit in fostering prejudice. A logic dealing with such questions (though it would still be general) would be *applied* (not *pure*) *logic*. It would borrow from psychology, and might properly be regarded as part of psychology.¹

Formal Logic, as distinguished from special and from applied logic, must be (1) *general* (or perhaps better universal) and (2) *pure* or *a priori*. As general, it abstracts from all differences in objects, and deals only with the form of thought. As pure, it admits of no empirical principles such as belong to psychology, and everything in it must be certain *a priori*.²

Since Formal Logic is concerned with the laws common to all thinking, it necessarily ignores the special laws which govern synthetic *a priori* thinking: it ignores in fact the problem of the *Kritik*.

The philosophical logic of the present time would question the possibility of making such a sharp separation between the form and the matter of thought. Mathematical logic, on the other hand, accepts the view that logic is the science of pure form, but it interprets form in a way different from that of Kant. If we are to understand him, we must put ourselves at the point of view of the eighteenth century. To his misfortune the doctrine of the categories is largely based on the logic of his time, which since then has suffered serious, and perhaps shattering, blows. But this is no reason why we should refuse to understand his argument, and still less why we should adopt towards him an attitude of superiority.

✓ § 2. Divisions of Formal Logic

Formal Logic is divided into a Doctrine of Elements and a Doctrine of Method.³ The latter is a practical or technical

¹ A 52-3 = B 77; A 54 = B 78-9; *Log. Einl.* II 4 (IX 18).

² A 54 = B 78.

³ Stoicheiology and Methodology.

part of logic—an art rather than a science. It is concerned mainly with the distinctness, exactness, and systematic arrangement of knowledge, and deals with such questions as definition and division.¹

The Doctrine of Elements is the theoretic or dogmatic part of logic,² and is divided into Analytic and Dialectic.

The Analytic analyses the whole formal business of understanding or thought into its elements, and it exhibits these elements as first principles for all logical criticism of our knowledge.³

Since logic abstracts from all reference to particular objects, and truth is correspondence of thought with its object,⁴ it is clear that logical criticism is concerned, not with truth, but with formal validity. All that logic can give us is a formal or negative criterion of truth.⁵ If our judgements are not consistent with themselves, or not in accordance with the formal laws of thought, then they are false; but a judgement which is free from formal contradiction may have no corresponding object, and so is far from being necessarily true.⁶

In this way logic is a *canon*, not an *organon*.⁷ It states only the negative condition, the *conditio sine qua non*, of truth. It can be used only for criticism, not for purposes of extending knowledge.⁸

When logic is used for purposes of extending or producing knowledge, it is being used as an organon. Such use is 'dialec-

¹ *Log. Einl.* II 3 (IX 17); *Log.* §§ 96-8 (IX 139-40).

² *Log. Einl.* II 3 (IX 18); A 60-1 = B 84-5.

³ A 60 = B 84; *Log.* § 96 (IX 139).

⁴ A 58 = B 82; A 58 = B 83; A 157 = B 196; A 191 = B 236; A 237 = B 296. ⁵ A 60 = B 84.

⁶ A 150 = B 189-90. If the object to which it refers does not correspond to it, then the judgement is false; if the object referred to cannot be given in intuition (empirical or pure), then the judgement is groundless; compare A 58 = B 83.

⁷ A 61 = B 85; *Log. Einl.* I 3 (IX 13). In A 796 = B 824 a canon is defined as 'the sum-total of the *a priori* principles of the correct employment of certain powers of knowledge'.

⁸ Analytic judgements can be made by the help of logical principles but they do not add to the matter of thought; they merely improve its form. *Log. Einl.* V (IX 35); *Einl.* VIII (IX 64); § 36 (IX 111).

tical', and is always illegitimate. The part of logic which criticises such use is called Dialectic, and is the second part of the Doctrine of Elements.¹ It is the logic, not of formal validity, but of illusion.

The distinction of Analytic and Dialectic goes back to the distinction in Aristotle between the *Analytics* and the *Topics*.² The word 'Analytics' refers in Aristotle primarily to analysis of reasoning into the figures of the syllogism. The *Topics* are a study of dialectical reasoning, or of the dialectical syllogism, whose premises are merely probable, not scientific.³

Kant is therefore using terms which refer to a traditional distinction in Formal Logic; but the interpretation he gives to Dialectic seems to be a preparation for the Dialectic of Transcendental Logic.

The Analytic of Formal Logic is traditionally divided into three sections, the first dealing with concepts, the second with judgement, the third with inference, usually identified with syllogistic reasoning. The corresponding powers or faculties are understanding, judgement,⁴ and reason. 'Understanding' is also used in a wider sense to cover all three.⁵

§ 3. *Formal Logic is entirely a priori*

For Kant all the laws of logic are known *a priori*, that is, independently of all experience.⁶ This means that they are independent of any particular experience, not that they are known before all experience. They are discovered only through observation of the natural use of understanding and reason.⁷

¹ A 61-2 = B 85-6; *Log. Einl.* II 1 (IX 16-17).

² See Ross, *Aristotle*, p. 21. Contrast A 268-9 = B 324-5.

³ This distinction is preserved in G. F. Meier, *Auszug aus der Vernunftlehre* § 6.

⁴ 'Urteilkraft.' It is because of this division in the Logic of Peter Ramus that 'Deficit in secunda Petri' came to mean 'He is lacking in judgement'. See A 133 n. = B 173 n. I am indebted for this explanation to Professor J. A. Smith.

⁵ A 130-1 = B 169. Compare A 75 n. = B 100 n.

⁶ *Log. Einl.* I (IX 12).

⁷ *Log. Einl.* II 2 (IX 17); compare A 52 = B 76-7.

(Formal Logic is an *a priori* science because the rules or laws of thought, with which it deals, are universal and necessary, and the universal and necessary must be known *a priori*. The necessity of the laws of thought seems to follow, for Kant, from the fact that logic is formal: just because logic is formal, it ignores all differences in the objects of thought, and the laws which it sets forth must hold whatever be the nature of the objects thought.¹ Laws which depend on the character of a determinate object are contingent: they vary with the object, and it is a matter of accident whether I think of this object or not.)

When we dealt with intuition in the Aesthetic, we abstracted from the varying matter of sense, and found the common or universal forms to be space and time. These were said to be known *a priori*, not merely because they were universal conditions of sensation, but also because they were wholes of such a kind that it could be known what their parts must be. Space and time are not merely necessary to sensible intuition: they have a kind of internal necessity in themselves. It was this double necessity which justified us in holding that they were the form, and not the matter, of intuition.

In dealing with thought we abstract² from the varying matter (or content) of thought, and seek to find a common or universal form of thought; and in this case also there should be an intelligible necessity to be discovered in the form of thought itself. This is, I believe, Kant's view, although it is not too clearly expressed. By reflexion on the use of under-

¹ *Log. Einl.* I (IX 12). It is a very common mistake to say that for Kant logic treats thought as if thought had no object. What Kant says, when he is speaking carefully, is that it ignores *differences* in objects (see, for example, A 52 = B 76), and this is true. Furthermore, though Formal Logic always assumes that there are objects of thought, it is under no obligation to explain what such objects are. It merely supposes that objects are given.

² The act of abstraction here must differ from that in the Aesthetic (see Chapter V § 9), for it does not give us individual wholes like space and time: it must also apparently differ in some way from that involved in thinking empirical concepts, since what it gives us has an intelligible necessity of its own.

standing in general, without reference to particular objects, we are said to discover the laws of thought, which are absolutely necessary; for without them we should not think at all.¹

This is plausible enough when we consider the law of non-contradiction, the supreme principle of Formal Logic.² It is also plausible, on the suppositions of Formal Logic, when we consider syllogistic reasoning and the figures of the syllogism.³ It is not so plausible, when we are concerned with the form of the concept, and still less when we are concerned with the forms of the judgement. Kant assumes that necessity and universality are found, and must be found, in the logical account of the concept and the judgement, because the subject there discussed is form, and not matter; but the question clearly demands further examination.

§ 4. *The Matter of Concepts*

A concept is a general (or universal) idea as opposed to a singular idea or intuition. As general it is an idea of what is common to many different objects, whereas an intuition is an idea of one individual object.⁴

The matter of concepts is their object: their form is their universality.⁵ The universality of concepts is necessary to judgement, and consequently to thought.

¹ *Log. Einl.* I (IX 12). The laws of thought are formal, and Kant sometimes speaks as if 'laws' and 'forms' of thought were the same thing. As in the case of the forms of intuition, Kant fails to stress sufficiently the double necessity present in the forms of thought, though his doctrine seems to me clear enough. The forms of thought are seen to be necessary (1) in themselves, and (2) as the conditions of all thinking. If they had not the first kind of necessity, they could not have the second. Compare Chapter VII § 4.

² A 151 = B 190.

³ The figures of the syllogism themselves depend, however, on the forms of judgement, which are presupposed by Formal Logic in the doctrine of the syllogism.

⁴ *Log.* § 1 (IX 91). There is no distinction here between 'universal' and 'general', and there is a verbal play on '*allgemein*' (general) and '*gemein*' (common).

⁵ *Log.* § 2 (IX 91). At times Kant speaks as if the concept *were* the form (or the way in which we know the object): see *Log. Einl.* V (IX 33). In *Log.* § 5 *Anmerk.* 1 (IX 94) Formal Logic is said to con-

When Kant speaks of the object as the 'matter' of the concept, or more generally of objects as the 'matter' of thought, there is a risk of misunderstanding, against which we must be on our guard. The matter of thought is what we think, and the matter of a concept is what we conceive, but it would perhaps be better to speak of it as the *content*, rather than the *object*, of *thought* or *conception*.¹ That there is for Kant a difference between the content and the object of thought is shown by his view that truth is the correspondence of thought with its object. We have not yet dealt with Kant's theory of the object proper (the phenomenal object), but we may say provisionally that an object proper must be given to sense (or at least be capable of being given to sense); and it is possible to have an arbitrary concept (such as the concept of chimaera) which, although it certainly has a content, has no corresponding object.²

It is to be observed that Kant habitually uses concrete rather than abstract words for the purpose of indicating particular concepts. Thus he speaks, not of the concept of spatiality (as I have done for the sake of clearness), but of the concept of 'spaces in general'.³ Similarly he speaks of the concept 'body' or the concept of 'the body'.⁴ This must not blind

sider the concept only as regards its form, that is, as regards the way in which it can be referred to objects; and this form is said to be necessary for judgement.

¹ This is, I think, implied in *Log.* § 19 (IX 101). The word for content is '*Inhalt*', which in the case of concepts can also be translated as 'intension' or 'connotation'. I am not quite sure of this point. Kant may perhaps use 'matter' for what I think is sometimes called the 'objective' or 'objectives' (as opposed to the objects) of thought. In A 598-9 = B 626-7 he seems to use '*Objekt*' for the 'objective' of thought (which need not be real) and '*Gegenstand*' for the 'object' (which must be a real thing). But his usage is not consistent.

² Compare A 729 = B 757. Yet even here we must distinguish the concept of chimaera from the individual chimaeras which we imagine as falling under that concept.

³ See A 25 = B 39. He also speaks of the categories as concepts of objects in general (A 93 = B 126) and as concepts of an object in general (B 128).

⁴ See *Log.* § 8 (IX 96) '*der Begriff Körper*' and A 69 = B 94 '*der Begriff des Körpers*'. He also uses '*der Begriff von*' as in '*der Begriff vom Hunde*'; see A 141 = B 180.

us to the fact that the content of a concept is not an individual object or objects.¹ A concept is an idea of what is common to several objects; it is *repraesentatio per notas communes*;² and, as we have seen, its content is composed of 'partial representations' or 'partial concepts'.³

It is obvious enough that a concept (if we ignore the possibility of there being some concepts which are simple)⁴ is made up of concepts which are part of itself; but this does not seem to be the reason why Kant speaks of concepts as containing partial representations or partial concepts. On the contrary, the main point of this expression seems to be that the content of our concepts is contained in our individual ideas, or intuitions, of objects themselves.⁵ The yellowness which is part of the content of our concept of gold is contained in our intuition of each individual piece of gold.

On this view every concept is a partial concept, since no concept can be adequate to our intuitions of individual things.⁶ Likewise every concept is a 'mark' of the individual things which fall under the concept,⁷ and (so far as it is not simple)

¹ We have seen this already as regards the content of the concepts of spatiality and temporality. See Chapter V § 7.

² See *Log.* § 1 (IX 91). The German for 'nota' is '*Merkmal*' (a mark).

³ '*Teilvorstellungen*', '*Partialvorstellungen*', or '*Teilbegriffe*'. See Chapter V § 7.

⁴ See *Log. Einl.* VIII (IX 59). Simple concepts cannot be further analysed.

⁵ Both views are present in Kant; see *Log. Einl.* VIII and also § 7 (IX 58-9 and 95). Compare Vaihinger, *Commentar*, ii, pp. 240 and 376.

⁶ 'Every concept, as a partial concept (*Teilbegriff*), is contained in the idea of things'; see *Log.* § 7 (IX 95). Compare *Log.* § 1 (IX 91): 'A concept is . . . an idea of what is common to several objects, and therefore an idea so far as it can be contained in different ideas' (? or objects). See also B 133 n. A concept, however, can never be completely determined (*omnimode determinatus*): it is only individual things, and apparently also intuitions, which can be so determined. See *Log.* § 15 (IX 99). It may be observed that in definition it is possible for a concept to be '*complete determinatus*', that is, to be '*rei adaequatus in minimis terminis*'; but this has a different meaning. See *Log.* § 99 (IX 140).

⁷ See *Log. Einl.* VIII (IX 58).

it is made up of such 'marks'.¹ From one point of view the matter of the concept is contained as a 'partial representation' in our intuitions of individual things; from another point of view the matter of a concept consists of 'marks' whereby we are able to recognise² individual things given to us in intuition.³ Yellowness is not only a 'partial representation' contained in our intuitions of pieces of gold; it is also one of the marks whereby we can recognise pieces of gold and distinguish them from other things.⁴ Considered as made up of 'partial representations' every concept has a content⁵ (that is, intension or connotation); considered as made up of 'marks' every concept has an extension or, perhaps better, denotation.⁶

This is not the place to consider the difficult questions raised by these distinctions. For the sake of simplicity it will be convenient to speak of concepts as made up of 'marks', ignoring the difference between 'marks' and 'partial representa-

¹ For example, among the 'marks' contained in the concept of 'body', we may reckon substance, force, divisibility, impenetrability, hardness, colour, extension, and figure. See A 20-1 = B 35.

² 'erkennen.'

³ 'A mark . . . is a "partial representation", so far as the "partial representation" is considered as a criterion (*Erkenntnisgrund*) of the whole idea'; and so as a criterion of the thing itself. See *Log. Einl.* VIII (IX 58). Perhaps '*Erkenntnisgrund*' might be translated as '*causa cognoscendi*'. 'The whole idea' cannot, in my opinion, be the whole concept here, and must be the whole intuition, though the language is not unambiguous.

⁴ Kant distinguishes, in *Log. Einl.* VIII (IX 58), between the internal and the external use of 'marks'. ⁵ '*Inhalt*.'

⁶ '*Umfang*' or '*sphaera*'. This seems to refer primarily to the individual things of which the concept is the criterion, or mark; but I believe it sometimes refers also to the species. Kemp Smith, I think, usually translates '*Umfang*' as 'extension'.

Note particularly that the connotation is contained in the concept, the extension (species) and denotation (individuals) are contained under it. It is easy to get confused on this point, since Kant speaks of the species as 'concepts' ('lower concepts'), and of the individuals as 'ideas' (*Vorstellungen*). We must not imagine that the concepts and ideas contained under a concept are the partial concepts or ideas contained in it.

tions'.¹ It must, however, be noted that the universality of the concept (which we have seen to be identical with its form) rests, not on the fact that the concept is a 'partial representation', but on the fact that it is a criterion or mark.² We may put this point more simply by saying that a concept is universal because of its use as a mark (or set of marks) for the recognition of individual things. To say this is to say that the universality or form of the concept is essentially dependent upon judgment; and we shall find that such is Kant's view.³)

§ 5. *Different Types of Concept*

We can understand Kant's doctrine most easily at the present stage, if we think of ordinary empirical concepts, but we must remember that the matter of concepts originates in different ways. This gives rise to a series of distinctions, the study of which belongs properly to Transcendental Logic.

As regards its *matter* a concept may be given empirically to sense; or it may be given *a priori* from the nature of understanding itself; or it may be arbitrarily constructed. In the first case we have an *empirical* concept;⁴ in the second an intellectual concept or *notion* (the reference is primarily to the categories); in the third an *arbitrary* or *factitious* concept.⁵ Factitious concepts are the result of an arbitrary combination of elements given either empirically or *a priori*. Obviously factitious concepts might also be regarded as empirical or *a priori* ac-

¹ This is not without warrant in Kant himself; see, for example, *Log. Einl.* VIII (IX 59-62) and compare A 43 = B 60.

² See *Log.* § 7 (IX 95). This almost looks as if the matter of the concept, *quā* 'partial representation', were still an intuition or part of an intuition, a doctrine which may be compared with that of Berkeley.

³ See A 69 = B 94 and compare Chapter XI §§ 4-5.

⁴ An empirical concept may, however, contain marks which are given *a priori*, as the concept of body contains, or presupposes, the mark or concept of substance. An empirical concept is also called a concept of experience (*Erfahrungsbegriff*).

⁵ Thus there are two kinds of *conceptus dati* (*gegebene Begriffe*) to be opposed to *conceptus factitii* (*gemachte Begriffe*). A factitious concept is also called arbitrary (*willkürlich*) and fictitious or imaginary (*gedichtet* and *erdichtet*).

according to the nature of the elements which constitute their content. Thus the concept of centaur¹ might be regarded as an empirical factitious concept, while the concept of a substance which was permanently present in space without filling it² might be regarded as an *a priori* factitious concept. In the latter kind of concept Kant takes a special interest, but he appears not to make this distinction.³

Kant does, however, recognise one special kind of arbitrary or factitious concept which may be called a *priori*, namely the *mathematical concept*.⁴ These concepts, I take it, are arbitrary only in the sense that they are concepts of figures which can be constructed *a priori* in a perfectly homogeneous space: Kant always assumes that they must be in accordance with the nature of space. The objects which they denote are arbitrarily delimited spaces, which, as containing no sensible matter, are the forms of objects rather than objects in the strict sense.⁵

✓ It is clear that the most important types of concept are (1) empirical concepts, (2) intellectual concepts or notions, and (3) mathematical concepts. These are the three types with which Kant usually deals, but it is necessary to recognise

¹ One example Kant himself gives is 'a ship's clock'. See A 729 = B 757.

² See A 222 = B 270, where other examples are given. Compare also A 96 and A 84 = B 117. In the last passage 'luck' and 'fate' are called 'usurpatory concepts' (*usurpierte Begriffe*); compare '*casus*' and '*fatum*' in A 228 = B 280.

³ In A 96 he speaks as if 'arbitrary and absurd fictions' might be *a priori* cognitions, but in A 222 = B 269 he seems to think concepts of this kind have some matter drawn from sense-perception; and it may be maintained that such factitious concepts cannot properly be regarded as *a priori*, since they lack the character of necessity.

⁴ See A 729 = B 757 and *Log.* § 102 (IX 141). In the latter passage mathematical concepts are opposed to all other factitious concepts as *conceptus factitii a priori* to *conceptus factitii per synthesis empiricam*. Curiously enough, Kant speaks here as if mathematical concepts alone were made arbitrarily, and as if *all* empirical concepts were *made* by an empirical synthesis which is not arbitrary: yet he still speaks of concepts *given a posteriori* in *Log.* §§ 101 and 104 (IX 141 and 142). There would seem to be some confusion here, perhaps due to the notetaker, unless 'given' and 'made' are used in a special sense.

⁵ Compare B 147 and A 223-4 = B 271.

that there are also factitious concepts which are not mathematical.¹

All these distinctions concern the matter of concepts, and it is in relation to their matter that concepts are said to be sometimes given and sometimes factitious (or made). Even in the case of factitious concepts it is clear, from Kant's examples, that the matter (or the elements of which the matter is composed) is not made:² all that we make is the special combination of the elements, whether these are given empirically or *a priori*.³

§ 6. *The Form of Concepts*

The form of concepts is always made and not given. This, I take it, is because a concept to be a concept, that is, to be a *general* or *universal* idea, must be used as the mark of objects capable (or supposed to be capable) of being given in intuition.⁴

¹ The main references for these distinctions are to be found in *Log.* §§ 4-5 and 100-104 (IX 93-4 and 141-2) and in A 727 = B 755 ff. They are all-important for the study of Kant's argument, for example, in A 219 = B 266 ff.

Kant never considers the concepts of spatiality and temporality, which seem to me to be in a class by themselves. They can hardly be called factitious or mathematical, for there is nothing arbitrary about them. As we have seen, they are derived from, and dependent upon, our pure intuitions, in somewhat the same way that empirical concepts are derived from, and dependent upon, empirical intuitions. They are not given, like the categories or Ideas of reason, in the nature of our understanding or reason. See Chapter V § 8.

² The elements of those 'absurd and arbitrary fictions' which may be, or at least seem to be, *a priori* cognitions would never even arise in thought apart from data; see A 96.

³ This in turn implies that the combination of the matter of *given* concepts (whether empirical or *a priori*) is also in some sense given, although not without the co-operation of thought. Compare B 130, B 134, B 161.

⁴ *Log.* § 4 (IX 93). Kant says 'the form of a concept, as a *discursive idea*, is always made'. To be a discursive (that is, a general and so mediate) idea it must be used as a means to know objects immediately given in intuition; and all human thought (or judgement) is essentially discursive or mediate in this sense. Compare A 19 = B 33. We must for the present ignore the case of concepts which have no object given in intuition.

(Formal Logic, just because it is formal, must ignore all the differences in concepts which are due to differences in the origin of their matter. It is concerned only with the nature of the concept as such, that is, with its form or universality; and this Kant identifies with the way in which the concept can be referred to a plurality of objects.¹)

Concepts are made, *as regards their form*, by logical acts of the understanding, namely, by comparison, reflexion, and abstraction. Of this Kant gives a simple example. I see a * spruce, a lime, and a willow. I *compare* them, and observe that they *differ* from one another as regards their trunk, their branches, their leaves.² I *reflect* on what they have in *common*, namely trunk, branches, and leaves. And I *abstract* from their size, shape, and so on; that is, I abstract from everything in which the seen objects differ from one another. In this way I obtain a concept of 'tree'.³

This is Kant's account of the logical origin of concepts as regards their form. I take it to be an account of what is necessarily involved in every act of conceiving.⁴ To conceive is to think in abstraction a common element found, or assumed to be found, in different instances. Only in this way can a concept be related to different instances by means of their common marks, and so be a universal or general idea. Kant holds this to be true of all concepts, whatever be the origin of their matter.⁵

¹ Log. § 5 (IX 94).

² This must mean as regards the character (size, shape, and so on) of their trunk, branches, and leaves.

³ Log. § 6 (IX 94). There are further details as to the nature of reflexion, comparison, and abstraction, but these must here be omitted.

⁴ The question of the origin of concepts, as regards their form, raises the question, 'What acts of the understanding constitute a concept?'; or—what according to Kant is the same thing—'What acts belong to the production of a concept out of given ideas?' See Log. § 5 (IX 93).

⁵ These three logical operations of the understanding are the essential and universal conditions for the making of any and every concept (*eines jeden Begriffes überhaupt*). See Log. § 6 *Anmerk.* 1 (IX 94-5). I take it that even a pure concept of the understanding has to be made 'clear' in this way; see A 195-6 = B 240-1 and Chapter XLIV § 2.

Kant's account might also be taken as a description of the process of producing concepts out of given ideas or, in his own words, 'an investigation of the first efforts of our power of cognition whereby we rise from individual sense-perceptions to general ideas'.¹ Such an investigation might be psychological or, as he calls it, physiological;² and inasmuch as it is empirical, it has properly no place in Formal Logic. It is possible that Kant fails to distinguish clearly between the logical and the psychological enquiry; but I think that for him the logical enquiry is concerned only with what is *necessary* for the making or thinking of any and every concept, if it is to be a concept.

As regards the psychological question, I believe Kant to hold that all concepts are gradually sorted out from experience, and our explicit or 'clear' knowledge of them is of comparatively late development.³ This does not mean that they are all dependent upon sensuous experience; for the matter of some concepts may be derived, not from the nature of given intuitions, but from the nature of thought itself.⁴

The whole doctrine may be taken as an elaboration of the common view, which also is not without its ambiguity, that concepts are known by abstraction from individual objects.⁵ Kant is careful to note that abstraction is only the negative condition for making general concepts: the positive condition is comparison and reflexion.⁶ He sometimes refers to the whole act involved as abstraction,⁷ or even as reflexion;⁸ and in the *Kritik* he implies that it is an act of *analysis*.

In one passage Kant speaks as if logic itself turned given ideas (or intuitions) into concepts by means of analysis.⁹ This is a loose employment of terms. Logic gives us an account

¹ A 86 = B 118-19.

² A 86-7 = B 119.

³ See A 85-6 = B 118 and A 195-6 = B 240-1.

⁴ This doctrine of Kant's about the nature of the categories must at present be taken on trust. For the purpose of following his argument it is advisable to use only empirical concepts as examples.

⁵ Compare G. F. Meier, *Auszug* § 259.

⁶ *Log.* § 6 *Anmerk.* 3 (IX 95). Abstraction is merely the thinking away of the differences in objects.

⁷ *Anthr.* § 3 (VII 131).

⁸ *Log.* § 5 *Anmerk.* 1 (IX 94).

⁹ A 76 = B 102.

of the method by which this transmutation is performed, but it is absurd to suppose that for Kant the form of all concepts is made by the science of logic itself. A more correct statement can be found elsewhere. 'Different ideas are brought under a concept analytically (a procedure treated of in general logic)'.¹ The act of analysis which is involved in all conception is also alluded to in a difficult passage,² where Kant says that the *analytic* unity of consciousness belongs to all common ideas as such, and that it is the *analytic* unity of consciousness which makes an idea a *conceptus communis*.³

It is to be observed that the act of analysis, while it seems to involve judgement, is not to be identified with analytic judgement in the technical sense. An analytic judgement is essentially a judgement made by analysis of a *concept*; here we are concerned with making concepts by analysis of *intuitions*. I mention this distinction because a failure to recognise it is, I think, one of the grounds for the mistaken view that Formal Logic deals only with the form of analytic judgements.⁴

(It is also to be observed, not only that the act of making a concept (which I take to be identical with the act of conceiving⁵) seems to be an act of judging,⁶ but also that all judging,

¹ A 78 = B 104.

² B 133-4 n.

³ The phrase 'analytic unity of consciousness' is obscure. The general doctrine of this passage is, however, clear: that in order to know the common element in different ideas (or objects) by an act of analysis I must necessarily hold these ideas (or objects) together before the mind by an act of synthesis.

⁴ This view is considered in Chapter X § 5. The failure to recognise this distinction is, I think, present in Kemp Smith, *Commentary*, p. 172 ff., although the main grounds for the assertions there made may be his apparent identification of discursive and analytic thinking; this is examined in Chapter X § 6.

⁵ Kant does not mean that in all conceiving we must have given intuitions actually present to the mind, but only that there is always a reference to some sort of individual objects assumed to be capable of being given in some sort of intuition. No doubt we can use a concept after it is made, but the act of thinking any concept would seem to be akin in certain essential respects to the original act by which the concept (that is, the *form* of the concept) is made.

⁶ A concept is regarded by Kant as essentially the predicate of a

so far as it is thinking by means of concepts,¹ is itself an act of conceiving.² For Kant conceiving and judging are inseparable. As he himself says, all the activities of the understanding can be reduced to judgement.³ If this is true, it follows that an act of analysis, and what he obscurely calls 'the analytic unity of consciousness', must be present in every judgement.⁴ To these difficult topics we shall have to return later.⁵

There is no reason to suppose that Kant ever abandoned the doctrines which have been here set forth, nor is there any good ground, so far as I can see, for holding that they are inconsistent with the Critical Philosophy. The account of the concept given by Formal Logic does indeed ignore the possibility that concepts may be of fundamentally different kinds, in so far as it ignores all questions as to the origin of their matter.⁶ It also ignores the fact that the analysis of which it speaks presupposes an act of synthesis as its condition, and in this act of synthesis concepts, and even judgements, already play their part. These points are discussed by Kant in his Transcendental Logic, and they may suggest that a logic restricted to bare form must be inadequate and even superficial. This does not, however, imply that the account given by Formal Logic is untrue.

*[One more point must be noted. It may be thought that

possible judgement; see A 69 = B 94. That is to say, a concept is a concept only in virtue of being applied, however vaguely, to a plurality of supposed objects.

¹ 'In every judgement there is a concept which is applicable (*gilt*) to many ideas, and comprehends (*begreift*) among these a given idea which is immediately related to an object.' See A 68 = B 93.

² Compare Kant's difficult definition of judgement. 'A judgement is the representation (*Vorstellung*) of the unity of consciousness of different ideas (*Vorstellungen*), or the representation of the relation of these ideas so far as they constitute a concept.' See *Log.* § 17 (IX 101).

³ See A 69 = B 94 and compare A 126. To conceive is to make a problematic judgement; to reason is to make an apodeictic judgement (see A 75 n. = B 100 n.).

⁴ Compare A 79 = B 105.

⁵ See Chapter XII § 5 and Chapter XIV § 6.

⁶ Kant's own Formal Logic treats of this, as of other topics proper to Transcendental Logic.

in his discussion of the form of the concept Kant is concerned with the form of conceiving rather than with the form of the concept.¹ I have no wish to minimise the difficulties of his doctrine, and I do not altogether like the statement that we make concepts (as regards their form) out of given intuitions. It is clear enough that his view is not so simple as the view of Berkeley—that in conceiving we merely use one intuition to stand for others of the same kind; for Kant clearly holds that in conceiving we are concerned with what is common to different intuitions. Nevertheless one has at times the uneasy feeling that he looks upon what is common as itself an individual intuition which receives its universality by being referred to many different objects as their 'mark'.² His doctrine may possibly be bound up with his own idealistic theory, which at this stage it ought not to be; but so far as I can find any positive evidence, he regards it as following from the fact that the logic with which he is at present concerned is formal. He gives this as the reason why Formal Logic must consider the concept *subjectively*; that is, must consider, 'not how the concept determines an object through a mark, but only how it can be referred to a plurality of objects'.³ This would seem to imply that the concept can be considered *objectively* only by a Transcendental Logic which does not entirely ignore all differences in the matter of concepts.⁴]

¹ The ambiguity which we have pointed out in the word 'intuition' (see Chapter IV § 2) is to some extent avoided in treating conception because we commonly use the word 'concept' for the *conceptum* and the word 'conception' for the act of conceiving; but 'conception' itself can be used in two senses.

² Anyone brought up on Plato tends to regard the concept (or the *conceptum*) as universal in itself: what we conceive is a common or universal 'Form' which is really present in its different instances. But the whole question is full of difficulties.

³ Log. § 5 *Anmerk.* 1 (IX 94).

⁴ I am not sure that I see why this should be so. Kant may mean that to understand how the concept determines an object through a mark we must understand how every object, as is proved in Transcendental Logic, must be a substance with attributes; we must, in short, understand what an object is, and this enquiry belongs only to Transcendental Logic.

CHAPTER X

FORMAL LOGIC (*continued*)

§ 1. *The Forms of Judgement*

The most important part of Formal Logic for the Kantian philosophy is the section on the forms of judgement, for on this is based the Metaphysical Deduction of the Categories.

The classification of the forms (or functions¹) of judgement, which Kant attributes to Formal Logic, is as follows:²

Judgements are divided, according to *quantity*, into universal, particular, and singular; according to *quality*, into affirmative, negative, and infinite; according to *relation*, into categorical, hypothetical, and disjunctive; according to *modality*, into problematic, assertoric, and apodeictic.

From the point of view of Formal Logic this is a good classification. It is identical with the list of forms which Mr. Joseph³ asserts 'has for long been commonly accepted'—with one exception, the so-called infinite judgement;⁴ and even this has a respectable pedigree, going back to Aristotle himself.⁵

I see no reason to object to Kant's list on the ground that under the head of relation he places simple and complex judgements,⁶ and ignores copulative⁷ judgements as a variety of the complex. The modern tendency to recognise the copulative judgement may have utility in mathematical logic, but for

✓ In this context 'form' and 'function' are used interchangeably. 'Function' seems to be the 'form' of an activity, and is never, I believe, used for the form of a passivity or receptivity (such as sense).

¹ A 70 = B 95.

² *Introduction to Logic*, Chapter VIII, p. 171.

³ S is non-P.

⁴ It is also recognised in the *Logik* of Baumgarten.

✓ ⁵ Kant does not allude to this distinction in his *Logik*, but he explicitly rejects the view that hypothetical and disjunctive judgements can be reduced to categorical judgements; see *Log.* § 24 *Anmerk.* (IX 105). Compare also *Nachlass* 3089 (XVI 652) and *Log.* § 60 *Anmerk.* 2 (IX 122).

⁶ Categorical with more than one subject or more than one predicate.

Formal Logic it is not strictly a form of judgement, and may be said to belong to grammar rather than to logic.¹

Nevertheless there are difficulties in the list, even for the least carping of critics. Kant's own discussion suggests doubt whether his list is strictly compatible with a logic which professes to ignore content or matter, and to concern itself solely with form.

The singular judgement is added to the universal and particular judgements, because if we consider, not its use in the syllogism, but its quantity, it deserves a special position.² [This is true, but we must ask whether such consideration of quantity is not a consideration of content.

Again, the infinite judgement is added to the affirmative and negative judgements, because we consider its worth or content.³ Kant even ascribes its inclusion, no longer to Formal, but to Transcendental, Logic;⁴ and the reason given for its inclusion is that the function of the understanding in such judgements might be of importance in the field of pure *a priori* cognition. For Formal Logic such a reason would be irrelevant.

Finally we are told that the modality of judgements is peculiar in the fact that it has nothing to do with the content of the judgement, and that quantity, quality, and relation actually constitute the content of a judgement.⁵

It would be unfair to press the last point unduly against Kant, but his language is unfortunate. He does not mean that quantity, quality, and relation, like triangles and vertebrates, are to be found in some judgements and not in others. He means that they are concerned with the way in which the constituents of a judgement must be combined, while the distinctions of the possible, the actual, and the necessary are concerned with the nature of the judgement as a whole, which may vary irrespectively of the way in which its constituents

¹ Compare *Log.* § 31 (IX 109), where Kant makes this assertion about exponible judgements.

² A 71 = B 96-7; *Log.* § 21 *Anmerk.* 1. (IX 102).

³ A 72 = B 97; compare *Log.* § 22 (IX 104).

⁴ A 71 = B 97; A 73 = B 98.

⁵ A 74 = B 100.

are combined.¹ Nevertheless his discussion shows that the whole question of the relation of form and matter in judgement is in need of a closer examination than he has given it.

§ 2. *Are the Forms of Judgement Universal and Necessary?*

In regard to the forms of judgement the same difficulty encounters us which we have already met in connexion with the forms of intuition. Are the forms of judgement strictly universal and necessary? Are they forms of all judgement, or merely of some? It is only in the former case that they can supply a basis for Kant's further argument.

Every judgement for Kant brings given cognitions to the objective unity of apperception.² More simply, it asserts an objective connexion between cognitions, not a mere subjective connexion in our minds, such as is made by the association of ideas.³

The term 'cognition' is here used in place of the term 'concept' in order to cover hypothetical and disjunctive, as well as categorical, judgements.

The matter of judgements is the cognitions so connected; the form is the way in which they are connected, and is supposed to be independent of the particular matter involved.⁴

¹ *Log.* § 30 (IX 108). If we take the constituents of the categorical judgement to be subject and predicate, the difference in quantity and quality depends on the way in which the subject and predicate are combined, and not on differences of content in the subject-concept and the predicate-concept: but however the subject and predicate may be combined, the whole judgement may be thought problematically, assertorically or apodeictically, the content of the whole judgement being the same in each case. In this sense differences in quantity and quality—and also differences in relation—may be said to concern differences in the content of the judgement as differences in modality do not. These differences in content might perhaps be called differences in formal, as opposed to material, content.

² B 141; *Log.* § 17 (IX 101); *Log.* § 60 (IX 121). Compare *Nachlass* 5923 (XVIII 386).

³ B 142.

⁴ A 266 = B 322; *Log.* § 18 (IX 101). We may note without discussion that the form in categorical judgements is said to be the copula, in hypothetical judgements to be the 'consequence', in disjunctive judge-

(It is noteworthy that Kant habitually speaks as if there were one ultimate form of judgement, which differentiates itself into several forms. Thus the 'function' or *form* of thought is brought under four 'heads', each of which contains three 'moments',¹ and this gives us the table of the logical functions of forms of thought.²

- The ultimate form of thought is for Kant the unity of apperception,³ the 'think' which necessarily accompanies all our ideas of objects.⁴ The crucial question for us is why this ultimate form of all thought should be supposed to differentiate itself, independently of the given matter, into twelve forms of judgement, no more and no less. Was Kant's reason merely the acceptance of a tradition and the analogy of the syllogism, which does differentiate itself *a priori* into a definite number of figures?

On this subject Kant is so confident that he gives little more than hints to guide us, and even these are complicated by the fact that he always has his own transcendental theories at the back of his mind.⁵ It would be tedious, and perhaps unprofitable, to examine them in detail here: a man does not usually give satisfactory reasons for the truth of a belief which he has not seriously questioned. Nevertheless it is desirable to consider whether there is any general plausibility in the doctrine, provided we do not scrutinise it too carefully.

Kant sometimes speaks as if there were only four forms of judgement;⁶ and it might be argued that every judgement must have quantity, quality, relation, and modality. If we could only stop there, there would be little difficulty in maintaining that Kant's forms are, as they ought to be, strictly

ments to be the disjunction; *Log.* §§ 24, 25, 28 (IX 105 and 106). In syllogisms the matter is the premises, the form is the conclusion so far as it contains the 'consequence'; *Log.* § 59 (IX 121). The 'consequence' is of course to be distinguished from the 'consequent'.

¹ A 70 = B 95.

² A 79 = B 105.

³ B 140. Compare A 217 = B 264.

⁴ B 132. Compare A 129.

⁵ See *Log.* §§ 17-30, and § 60 (IX 101-9, 121-2).

⁶ A 406 = B 432.

universal. The difficulty arises in connexion with the three 'moments' which are to be found under each of the four main 'forms'.

These moments are, from the point of view of ordinary Formal Logic, alternatives; and the utmost that Formal Logic could do would be to show that they, and they alone, are necessary alternatives. By the exercise of ingenuity we might perhaps find in these divisions enough show of intelligible necessity to explain how Kant, under the influence of tradition and analogy, could accept the list as complete; but there appears to be no single principle of division such as he assumes must be discoverable from the nature of the understanding as an absolute unity.¹ There is on the contrary a departure, although not a departure without precedent, from the ideals of Formal Logic itself.²

It is a curious fact that Kant should help us so little about the principle of his division, especially in view of his interest in such topics, and in view of the oddness of the division itself, with its four main forms and its three subordinate moments. It is also curious that he should assume without question our *a priori* knowledge of the forms of thought, when he has made so much difficulty in regard to *a priori* knowledge of the forms of intuition; and it is all the more curious because our *a priori* knowledge in Logic is presumably conceptual rather than intuitional. He may have thought that it is natural to have conceptual knowledge of an activity which is itself conceptual, or that we have some special insight into the nature of our own activities, such as we never could have in regard to things given us from without; but the question is clearly in need of discussion, and so far as I am aware, it is never even discussed.

¹ A 67 = B 92.

² This is most obvious in the case of singular and infinite judgements, since the singular judgement takes into account the particular nature of the subject, and the infinite judgement takes into account the particular nature of the predicate. Compare *Log.* §§ 21 *Anmerk.* 1 and 22 *Anmerk.* 1-3 (IX 102 and 104).

§3. *Kant's Central Argument*

With the best will in the world we cannot justify, though perhaps we can excuse, Kant's belief in the necessity and completeness of his list of forms. It is, however, all-important to understand precisely what Kant imagined himself to have found in this list; for only so can we follow his argument about the categories, and see the irrelevance of some of the criticisms commonly brought against him.

(The essential point of his appeal to Formal Logic on this matter is that we are supposed to have here a complete and necessary list of the forms of judgement *which are wholly independent of the particular nature of the objects judged*. If this were true, and if, further, nothing could be an object of experience without being judged, then every object of experience must be capable of being judged under all these necessary forms of judgement.)

This is, as it seems to me, the very crux and centre of Kant's argument, so far as it depends upon Formal Logic; and if his premises were true, as all the world at the time believed them to be true,¹ his conclusions might seem to have the apodeictic certainty which he claimed, instead of being dismissed lightly as ingenious pedantry.

§4. *Some Criticisms*

In the light of this assumption it is also possible to see Kant's answer to complaints that he has failed to recognise distinctions emphasised by modern logic. On his view these distinctions are concerned, not with the form, but with the matter, of judgement.

Thus, to take a definite instance, Kant has been criticised for not recognising the difference between merely enumerative and truly universal propositions. Kant does recognise a difference between general propositions (derived from induction) and strictly universal propositions²; but, as he says, this is

¹ See, for example, *M.A.d.N. Vor.* (IV 474 n.).

² *Log.* § 84 *Anmerk.* 2 (IX 133); compare A 91 = B 124; A 300 = B 356; and *Grundlegung* (IV 424).

no concern of Formal Logic.¹ It is not a difference in the form of the judgement, but depends on the particular nature of the matter judged.

It is equally obvious that the kinds of proposition distinguished so emphatically by mathematical logic—as for example, the subject-predicate, class-membership, and relational propositions²—would for Kant, and indeed for any formal logician of the old school, be distinguished by their matter, and not by their form.³ It is important to recognise this fact, because although mathematical logic, like Kant's Formal Logic, claims to be a science of pure form,⁴ it uses the word 'form' in a different, although allied, sense.

For mathematical logic the form of a proposition is what remains unchanged, although all the constituents of the proposition are altered.⁵ For Kant there can be no pure form of a proposition, unless *every possible constituent* of a proposition can be fitted into it. Thus he would not regard ' $A = B$ ' as a form of judgement, because although many different terms may be substituted for A and B, all these terms must be quantities; that is, they must refer to a certain kind of object, while a pure form must apply to every possible kind of object. Hence to complain that Kant did not consider, for example, relational propositions, it is to misunderstand what he was trying to do.

I do not suggest that there is any necessary antagonism between Kant's point of view and that of mathematical logic. On the contrary, it is no part of Kant's case that Formal Logic is a *sufficient* account of all reasoning. He believes it to be true so far as it goes, but he maintains, for example, that it cannot account for the special characteristics of mathematical

¹ *Log.* § 21 *Anmerk.* 2 (IX 102). I am assuming that he uses the words in the same sense in §§ 21 and 84. Although this distinction makes a great difference in the value of a syllogism, it does not, I think, affect its validity from a purely formal point of view.

² Stebbing, *Logic*, p. 45.

³ Or by a form which depended on the matter—a particular and not a universal form.

⁴ Stebbing, *Logic*, p. 163.

⁵ *Ibid.* p. 126.

reasoning. The modern study of relations in logic may be regarded as a development of his view that mathematical thinking depends, not on the form of the syllogism, but on specific spatial and temporal relations.

It must nevertheless be recognised that Kant's Formal Logic and modern mathematical logic are trying to do different things, and the criticism that Kant ought to have done what mathematical logic does is an unreasonable criticism.

§ 5. *Kant's Ideal*

Criticisms of this type, although, as I believe, mistaken, raise a more fundamental question. Is not Kant's ideal in itself impossible? Can we discover universal and necessary forms of thought in entire abstraction from the different kinds of subject-matter? Are we not bound to take some account of the subject-matter, as Kant does himself, or else to be left, not with a form of thought, but with a mere form of words?

This is a difficult question which we can hardly attempt to discuss here. There are indications in Kant of a tendency to move beyond the verbal distinctions, and the mutually exclusive forms of judgement, offered us by Formal Logic, and to consider the forms of judgement as 'moments' present in all thinking without exception. This interpretation is suggested partly by the use of the word 'moment';¹ partly by the three-fold division which implies (1) a condition, (2) a conditioned, and (3) that which arises from the union of the two;² and partly by the treatment of the categories which are derived from the forms of judgement. If we could take this as representing Kant's thought at its best, the mutually exclusive forms recognised by Formal Logic would have to be regarded

¹ In A 70 = B 95 'moment' is applied only to the three subordinate forms under each of the four main heads. In *Prol.* § 21 (IV 302) all the forms of judgment are treated as 'moments'; compare also *Log.* § 20 (IX 102) and *Prol.* § 20 (IV 302 n.).

² See *Log.* § 113 (IX 147-8); and compare *K.d.U. Einl.* (V 197 n.) and *Nachlass* 3067 (XVI 639). A fuller statement will be found in Chapter XV § 2.

as merely stressing aspects or moments of thought present necessarily in all judgement.

* (This is not such an impossible suggestion as might appear at first sight. It might be argued that every judgement (as involving conception) is concerned with a plurality of singular individuals considered as a totality, and this is, I believe, Kant's own doctrine.¹ Again, it might be argued that every judgement—if we consider it as a concrete act and not merely as an abstract proposition—denies in affirming and affirms in denying, and so necessarily delimits.² of this view also there are indications in Kant. Categorical, hypothetical, and disjunctive judgements he appears to regard always as alternatives:³ but even here it might be argued that every judgement, so far as it is an assertion about reality, is categorical; that so far as it asserts for a reason, it does so subject to a condition, and is hypothetical; and that so far as it delimits a 'sphere' or 'spheres' within the whole of reality, it is disjunctive. As to problematic, assertoric, and apodeictic judgements, Kant himself appears to suggest that a judgement is problematic so far as it accords with the principle of non-contradiction; that it is assertoric so far as it accords with the principle of sufficient ground; and that it is apodeictic so far as it accords with the principle of excluded middle.⁴ If this were true, I take it that since all judgements must conform with these laws of thought, all judgements might be said to contain the three 'moments' of modality.)

Even if we accepted a view of this kind, it would still remain necessary for us to show why thought necessarily articulates itself into just these 'moments' and no others. Kant, it seems

¹ See A 67 = B 92 ff. and compare Chapter XII § 5.

² The infinite judgement may be said to recognise, although in an artificial way, a necessary characteristic of all judgement.

³ See B 112; A 73 = B 98; *Log.* §§ 60, 23, and 27-9 (IX 121, 104, and 106-7).

⁴ *Log. Einl.* VII (IX 52-3). I find the details of this difficult to understand, but I think it is perhaps possible to hold that every judgement must be logically possible, logically actual, and logically necessary. Compare Chapters XLIX and L.

to me, has manifestly failed to do this, and I do not know whether it is possible to establish a necessary and limited number of 'moments' in thought as such. Nevertheless his argument becomes intelligible, if he believed, as I think he did, that this ideal had been realised. If we can penetrate behind the formalism in his expression, we shall find that his theory is not without plausibility, and that the connexion between the forms of judgement and the categories is very much more reasonable than is commonly supposed.

§ 6. *The Form of Synthetic Judgements*

Kant never varies in his assertion that Formal Logic is concerned with the form of thought in general,¹ and gives us the universal and necessary rules of the understanding.² The form of thought is for Kant primarily the form of judgement, and the list of forms of judgement gives us the logical forms³ *in all possible judgements.*⁴ As we have seen, he regards the list as necessarily complete.

In spite of this, it is repeated from commentator to commentator, especially in this country, that Formal Logic gives us the forms of analytic judgements only, and not the forms of synthetic judgement.⁵ I can find no evidence that Kant ever held such a belief.

We must distinguish three kinds of thinking in close connexion with logic. There is, firstly, the thinking which takes place in the science of logic itself; secondly, there is the thinking which takes place by the rules of logic alone, without help

¹ A 55 = B 79.

² A 59 = B 83-4.

³ Kant uses the word 'function.'

⁴ A 79 = B 105.

⁵ See *Mind*, Vol. XL, N.S. No. 159. This view is no doubt complicated by a tendency to confuse, or to classify together, judgements made by analysis of a subject-concept (analytic judgements proper) and judgements made by analysis of an object. I seem to find it in Caird, Prichard, and Kemp Smith, the three major English commentators, who appear to be unconscious that it is even in need of defence. For some account of it in Germany and a most unconvincing defence, see Kinkel's introduction to Kant's *Logik* (*Phil. Bib.* 43). Compare also England, *Kant's Conception of God*, p. 91.

from any other source (such as empirical or pure intuition); and thirdly, there is the thinking about which the logician thinks, and of which he seeks to grasp the form.

These three kinds of thinking naturally involve inference and conception as well as judgement. We are here concerned with them only so far as they involve judgement.¹

The judgements in the science of logic itself are, as we have seen, entirely *a priori*. I have not found any statement in Kant that they are analytic and not synthetic, but—in spite of a suggestion that the division of the forms of judgement into three ‘moments’ is synthetic²—I am prepared to assume that they are all properly regarded as analytic.

The judgements which take place by the rules of logic alone, and the judgements whose truth is guaranteed by the rules of logic alone, are certainly analytic, and not synthetic.³

It is mere confusion of thought to suppose that, because these two kinds of judgement are analytic, therefore the judgements of which logic states the forms must also be analytic. A logic which restricted itself in this way would not be a *general* logic.

The reason why analytic judgements can be made by the rules of logic alone (in particular by the law of non-contradiction) is that they affect only the form of our cognition.⁴

¹ I am inclined to think that all the forms of judgment are for Kant involved in conception as such (so far as conception is judgement).

² *K.d.U. Einl.* IX (V 197 n.). Compare B 110, *Log.* § 113 (IX 147–8), and *Nachlass* 3067 (XVI 639). The mere fact that logic analyses the activities of thought does not of itself prove that the judgements of logic are analytic judgements.

³ Such truth is, however, a very dubious kind of truth; it depends on the supposition that there is an object corresponding to the subject-concept; see A 151 = B 190–1. This passage is incidentally one of the many which show that an analytic judgement is assumed to be about an object, and not merely about a concept. This is, however, implied merely in the fact that an analytic judgement can be true, since for Kant truth is always correspondence with an object. Compare also A 736 = B 764.

⁴ *Log. Einl.* VIII (IX 64). That is to say, they make ‘distinct’ what is ‘indistinct’.

Synthetic judgements add to our knowledge *materialiter*, not merely *formaliter*,¹ and for this reason Formal Logic gives no account of them, *so far as they are synthetic*. It does not follow from this that their form is not the form common to all judgement, or that logic gives no account of such a common form. I have yet to see a logic which refuses to admit the judgement 'All men are mortal'. Yet this is unquestionably a synthetic judgement.

Formal Logic, I submit, gives an account of synthetic judgements, not so far as they are synthetic, but so far as they are judgements.² The forms of judgement are common to all judgements, whatever be the origin of their matter; just as the form of the concept is common to all concepts, whatever be the origin of their matter.

What does the opposite view mean? It means that synthetic judgements are neither universal nor particular nor singular; neither affirmative nor negative nor infinite; neither categorical nor hypothetical nor disjunctive; neither problematic nor assertoric nor apodeictic. That is to say, they are not judgements at all, which is what we should expect of anything that does not share the form of judgement.

This view—if we state it clearly—is nonsense, and a source of nonsense.³ It ought not to be attributed to Kant without the most conclusive evidence, and such evidence seems to me to be lacking. To my mind it is a palmary instance of the way in which Kant is first misunderstood, and then condemned for something which he has never said.

¹ *Log.* § 36 *Anmerk.* 1 (IX 111).

² Formal Logic treats all judgements alike: it ought not even to know the name of synthetic judgements; see A 15 = B 193.

³ For example, since all empirical judgements are synthetic, this view implies the further nonsense that no empirical judgement partakes of the form of judgement. Yet Formal Logic deals with all judgements, whether their content be empirical or pure or transcendental, since it ignores these differences. See A 53 = B 77; A 56 = B 80; A 57 = B 82, etc.

§ 7. *Discursive and Analytic Thinking*

Although there is, so far as I can see, no evidence for the view that Formal Logic, either in the eyes of Kant or of any of his contemporaries, gives us the forms of analytic judgments only, there are a number of statements which have been taken as offering such evidence. These I have examined elsewhere.¹ I can deal here only with the most important of them.

✓ Formal Logic is for Kant the logic of *discursive* thought, and discursive thought is sometimes supposed to be identical with *analytic* thought.² This is an error.

The word 'discursive' is equivalent to 'conceptual', and is opposed to 'intuitive'.³ 'Cognition through concepts is called thought (*cognitio discursiva*)'.⁴ *All human, and indeed all finite,*

¹ *Mind*, Vol. XL, N.S. No. 159. See also Chapter IX § 6.

² Professor Kemp Smith habitually identifies discursive thinking with analytic thinking, and opposes it to synthetic thinking. See, for example, *Commentary*, pp. 176 ff.

³ Since in human beings intuition alone is immediate (as well as passive and singular), this should be taken to imply that discursive thought is mediate (as well as active and general). Discursive thought would seem to be mediate in the sense that it is a means to intuition (see A 19 = B 33); or perhaps better in the sense that it is not related immediately to its object, but is related (in the last resort) to an intuition which alone is in immediate relation to an object (see A 68 = B 93). More simply, discursive thought is *about* an object given immediately to a passive intuition (intuition is *of* its object, and not about it).

I have found no clear account of the history of the word 'discursive', but it appears to have developed from Plato's distinction between *διάνοια* and *νόησις* in the *Republic*. 'Discursive' is equivalent to 'conceptual' only so far as conception is mediate. A power of intuitive conception, if we possessed it, would not manifest itself in discursive thinking.

On this topic, compare Muirhead, *Coleridge as Philosopher*, p. 65.

⁴ *Log.* § 1 (IX 91). Compare A 68 = B 93, where cognition through concepts is said to be 'not intuitive but discursive'; and A XVII-XVIII, where discursive 'distinctness' is through concepts, and intuitive 'distinctness' is through intuition. In *Log. Einl.* V (IX 36) the difference between intuitive and discursive cognitions is the same as the difference between intuitions and concepts. See also *Log. Einl.* VIII (IX 58) and A 230 = B 283.

thinking, since it is conceptual, is necessarily discursive. Human beings have no way of obtaining intuitions apart from passive sensibility,¹ and do not possess intuitive understanding² or intellectual intuition.³ That is to say, human beings can only think, by means of general concepts, *about* individual objects given immediately in sensuous intuition; and apart from what is given in sensuous intuition, their thoughts or concepts would have no reference to any determinate object.⁴ This would apparently not be true of a being which possessed intuitive understanding: for such a being, objects would be given or produced in the very act of cognition itself.⁵

Knowledge is to be distinguished from mere thinking, since it involves both thought and intuition.⁶ In the *Kritik* Kant goes so far as to say that all *knowledge* yielded by human understanding, since it is through concepts, is not intuitive but discursive.⁷ More correctly, knowledge involves for human

¹ A 67-8 = B 92; B 135.

² A 68 = B 92.

³ B 68 and B 159. An intellectual intuition would be immediate, but active or spontaneous like thought: a sensuous intuition is immediate, but passive or receptive. Intellectual intuition apparently could not belong to any kind of dependent finite being, but only to a self-sufficient primordial being (*Urwesen*); see B 72. I presume that the sole object of such a being would be its own acts of cognition: its knowledge would be *νόησις νοήσεως* (see B 145).

⁴ A 51 = B 75; A 258 = B 314.

⁵ B 145. I do not know whether this is the reason why Professor Kemp Smith opposes 'discursive' thinking, not only to 'synthetic', but also to 'creative' thinking (see, for example, *Commentary*, pp. 177-8). Synthetic thinking as such is not creative: it depends on matter given to intuition. Synthetic thinking by means of the categories—even if it is alleged to be pre-logical and unconscious—can have nothing to do with that creative thinking (if it can be called so) which belongs to an intuitive understanding and alone is opposed by Kant to discursive thinking; for the categories have 'absolutely no significance' in connexion with the cognitions of an intuitive understanding. Thinking by means of the categories is just as discursive as thinking by means of empirical concepts, and it always requires a matter given to sensuous intuition.

⁶ B XXVI n., B 146, etc., and compare Chapter II § 4.

⁷ A 68 = B 93. Compare *Log. Einl.* VIII (IX 58). In the first passage 'knowledge' (*Erkenntnis*) may be used loosely for 'thought', but I doubt if this can be so in the second passage.

beings both thought and sensuous intuition; that is, it involves both a discursive element and an intuitive element.¹ According as the discursive or the intuitive element is the more prominent, we sometimes describe the whole cognition as discursive or intuitive.²

Thus mathematical knowledge is often described as intuitive, because we can construct *a priori* in pure intuition objects corresponding to our mathematical concepts; and this intuitive element is, for Kant, the basis of mathematical reasoning. Philosophy, on the other hand, is described as discursive knowledge, because it must work through mere concepts (although always in relation to possible intuition).³ This distinction is one of degree, and not of kind.

All analytic judgements are discursive,⁴ but it is a mistake to suppose that all discursive judgements (that is, all judgements in which the discursive element is more prominent than the intuitive) are analytic. Some discursive judgements are certainly synthetic. Indeed, so far as I can discover, the only synthetic judgements which are called intuitive are those of mathematics.⁵

There can in any case be no doubt whatever that the synthetic principles of Kant's own philosophy are discursive. Even the Principle of the Axioms of Intuition, although it is a synthetic *a priori* principle, is not itself an axiom, but is obtained by means of concepts, and so is discursive.⁶ And, as Kant himself says explicitly, a transcendental proposition

¹ A 50 = B 74.

² *Fortschr. d. Metaph., Beilag I, Abs. 2* (*Phil. Bib.* 46c, p. 156).

³ *Log. Einl.* III (IX 23), *Einl.* IX iii, 3 (IX 70); A 719 = B 747.

⁴ Compare *Nachlass* 3140 (XVI 675).

⁵ Perhaps this is because we construct the object *a priori* in pure intuition, and so approximate most closely to intellectual intuition.

⁶ A 732-3 = B 760-1. Compare *Log.* § 36 *Anmerk.* 2 (IX 111). Synthetic *a priori* principles are axioms only if they are intuitive; that is, if they possess that immediate certainty which arises from the fact that we can construct *a priori* in intuition objects corresponding to the concept employed in the axiom. This is possible only in mathematics. The contrast between discursive and intuitive knowledge is a contrast between philosophy and mathematics.

is *synthetic* knowledge, through reason, in accordance with mere concepts; and it is *discursive*.¹

One example of this kind is enough to show that the analytic and the discursive are not identical. Hence the fact that Formal Logic is concerned with the forms of discursive thinking gives not the slightest warrant for asserting that these forms are the forms of analytic judgement alone;² and it is altogether un-Kantian to oppose discursive and synthetic thinking to one another.

So far as I can see, the doctrine of Kant on this matter is clear and consistent, and there is no confusion between Critical and non-Critical theories. From the point of view of Formal Logic there is an element of analysis in all judgement; for all judgement involves conception, and to conceive or to judge is always to think of what is common to different objects. Hence thought as such may be regarded, and properly regarded, as involving an analysis of the objects about which it thinks.³ This has nothing whatever to do with analytic judgements, which are made, not by analysis of objects, but by analysis of the subject-concept. It seems to me that a confusion between these two kinds of analysis is to be found in many of Kant's critics: it is never found in Kant himself. Furthermore there is not the slightest inconsistency between the doctrine that analysis is to be found in all judgments and the doctrine of synthesis to which we are about to be introduced.

§ 8. *Judgement is Synthesis*

The recognition that the forms of judgement are the forms of all judgement (both analytic and synthetic) makes a funda-

¹ A 722 = B 750.

² To say that Formal Logic is concerned with the forms of discursive thinking is merely to say that it is concerned with the forms of human or finite or conceptual thinking, a very harmless observation indeed.

³ Discursive thinking is at least closely connected with this kind of analysis, and this connexion may be one of the sources of the misunderstanding I have discussed.

mental difference to our interpretation of Kant's Deduction of the Categories. Indeed unless the forms of judgement are forms of synthetic, as well as of analytic, judgement, the Deduction is as arbitrary and unintelligible as it is commonly believed to be. But I venture to submit that both the tortured efforts to reduce Kant to sense, and the crushing demonstrations of his failure to grasp the implications of his own argument, rest alike upon what Kant would describe as a mere *Hirngespinnst*,¹ so far as they depend upon the supposition that the forms of judgement belong to analytic judgements alone.

I will go farther, and insist that for Kant there is an element of synthesis in every judgement, and indeed in every form of judgement. This explains (what to so many is unintelligible) how Kant could think that the forms of judgement are the source of the categories, which are principles of synthesis.

This point will be made clearer as we examine Kant's argument in detail. It is, however, implied even in his definition of judgement as 'a way of bringing given cognitions to the objective unity of apperception';² for the objective unity of apperception is that through which the given manifold is united in the concept of an object.³ In the logical functions (that is, forms) of judgement combination, and therefore unity of given concepts, is already thought.⁴ This 'combination' is identified with *synthesis*, and is defined as 'representation of the synthetic unity of the manifold'.⁵ This synthesis, Kant insists, is present even where the judgements are analytic, the distinction between analytic and synthetic judgements being here irrelevant.⁶

In the *Prolegomena*⁷ Kant is equally clear. To think is to unify⁸ ideas in one consciousness, and this unification of ideas in one consciousness is judgement. The logical moments (or forms) of all judgement are so many ways of unifying ideas

¹ A phantom of the brain.

² B 141.

³ B 139. Compare also *Log.* § 17 (IX 101).

⁴ B 131; B 305-6.

⁵ B 130.

⁶ B 131 n.

⁷ *Prolog.* § 22 (IV 304-5).

⁸ 'vereinigend.' It is equivalent to 'synthetise.'

in one consciousness.¹ When these logical moments (or forms) serve as concepts (that is, as categories), they are concepts of the necessary *unification* of ideas in one consciousness. This *unification* is *either analytic (through identity) or synthetic (through the adding of one idea to another)*.

From these passages and others² it is clear that for Kant every judgement (whether it be classified as analytic or synthetic) involves a synthesis, and that this synthesis is thought in the very form of the judgement itself.³ Every categorical judgement, for example, involves a synthesis of subject and predicate, and in this connexion it is irrelevant whether the predicate can be obtained by analysis from the subject-concept or not. This truth, which Kant has been so often blamed for failing to see, is an essential part of his argument, a fact familiar to a contemporary commentator like Mellin,⁴ though too often forgotten to-day; and I believe it to be the key to the whole elaborate Deduction of the Categories, both Metaphysical and Transcendental, which it will shortly be our business to consider.

¹ Compare *Log.* § 18 (IX 101).

² See *Mind*, Vol. XL, N.S. No. 159, pp. 321 ff.

³ It is also, I think, clear that the synthesis is a synthesis, not only of concepts, but of a manifold thought by their means.

⁴ *Encyclopädisches Wörterbuch d. Krit. Phil.*, III, p. 519: 'Every judgement is a synthesis.' Compare B 138, where Kant says that he can comprehend ideas as *synthetically* combined in one apperception through the *general* expression 'I think'.

CHAPTER XI

TRANSCENDENTAL LOGIC

§ 1. *Transcendental and Formal Logic*

In the Transcendental Aesthetic we examined sensibility by itself, and discovered that the *a priori* elements contributed to knowledge by sensibility were space and time. In the Transcendental Logic we must similarly examine understanding, and try to discover what, if any, are the *a priori* elements contributed to knowledge by thought.

It is important to distinguish Transcendental Logic from Formal Logic, and the difference is to be found in two main points.

✓ The first point is this. Formal Logic is concerned with the necessary rules, or the necessary form, of *all thinking*, whether empirical or pure, whether analytic or synthetic. Transcendental Logic, on the other hand, studies, and studies only, the rules of *synthetic a priori thinking*.¹

This means that Transcendental Logic does not, like Formal Logic, abstract entirely from the content or matter of thought. Synthetic *a priori* thinking is impossible apart from pure intuition. Hence Transcendental Logic excludes from its consideration cognitions so far as their content is merely empirical; but without the pure manifold of space and time, as set forth in the Transcendental Aesthetic, the *a priori* element contributed by thought would be empty.²

¹ A 55 = B 80; A 154 = B 193. More exactly, it studies the concepts and principles of synthetic *a priori* thinking.

² A 55 = B 79-80; A 76-7 = B 102; A 155 = B 194. To be 'empty' is to be without objective reference or validity. The first passage seems to me to state that *because* there are pure as well as empirical intuitions, it might be possible to find a difference between pure and empirical thought of *objects*. This is undoubtedly the Critical doctrine, and I can see no reason to interpret this passage as failing to indicate that pure thought of *objects* depends upon pure intuition. But even if we insist that it does not assert such dependence, there would not be the slightest ground for maintaining that when Kant wrote this

✓The second point in which Transcendental Logic differs from Formal Logic is this. Transcendental Logic is concerned only with what is known *a priori*, or in other words with the universal and necessary. What is universal and necessary can, on Critical principles, be known only if it is due, not to the nature of the object, but to the nature of the mind. Hence Transcendental Logic has to enquire into the *origin* of the *a priori* cognitions which it studies. Such a question is never raised by Formal Logic, which accepts knowledge as given and, without enquiring into its source, considers its form alone, and determines the formal laws which govern its use in reasoning.¹

Transcendental Logic therefore differs from Formal Logic, firstly, because it deals with a *particular* kind of thought (synthetic *a priori* thinking),² while Formal Logic deals with all thought; and secondly, because it seeks to determine the *origin* of the kind of thought it studies, a question which Formal Logic ignores.

§ 2. *The Nature of Transcendental Logic*

The question with which Transcendental Logic is concerned is whether our synthetic *a priori* knowledge has elements contributed to it by the nature of the human understanding, in addition to those elements contributed by human sensibility. The elements contributed by sensibility were pure intuitions which contained the form of intuition. The elements contributed by understanding would by analogy be pure thoughts, sentence he was unaware of this dependence. And indeed the statement that Transcendental Logic would not abstract from all the content of knowledge, but only from the empirical content, seems itself to imply such dependence.

¹ A 56 = B 80.

² This statement remains true, although we shall find that synthetic *a priori* thinking is present in all our empirical judgements, just as pure intuition is present in all empirical intuitions. This is indicated in the account of Transcendental Logic given in A 55 = B 79 ff., and in the account of its divisions given in A 62 = B 87 ff. The common complaint that Kant does not make this clear at the start seems to me groundless.

or pure concepts, containing the form of thought.¹ We have already learnt that pure concepts are given, as regards their *matter* or *content*, in the nature of understanding itself;² and this can only mean that the content of pure concepts is the form of the acts of thinking. Such pure concepts would have their origin in the nature of thought itself, and would not be derived by abstraction from either empirical or pure intuition, although, like all other concepts, they would be empty apart from intuition.³

We are now told that pure concepts would be acts of pure thought.⁴ This is a difficult statement, and we are offered little help as to its precise meaning. We can hardly take 'concept' to mean 'conceiving'; if we could, every concept would be an act of thought, and every pure concept would be an act of pure thought. Kant is presumably asserting that the *content* of the pure concept must be acts of pure thought; or more exactly that the content of the pure concept must be what is *common* to acts of pure thought.⁵ I doubt if this means more than that a pure concept is a concept of what is common to acts of thinking or judging, so far as these acts are formal and therefore pure; it is, in short, another way of saying that pure concepts are concepts of the forms of thinking.⁶ We must, however, remember also that although we can isolate pure concepts in philosophy and conceive them 'in their purity',⁷ they are manifested throughout our ordinary experience in the very form of the judgements which we are continually making

¹ A 51 = B 75, 'The form of thought of an object in general.'

² See Chapter IX § 4 and compare *Log.* §§ 3 and 5 (IX 92 and 93).

³ Their content would be empty forms of judgement. Compare A 239 = B 298.

⁴ A 57 = B 81, '*Handlungen des reinen Denkens.*' Compare also A 96, where the categories are said to contain the pure thought involved in every experience.

⁵ It must not be forgotten that Kant describes, for example, the concept of spatiality as the concept of spaces in general; and that the concept of activity might be described as the concept of acts in general.

⁶ As Kant himself adds, they are therefore not of empirical or aesthetic origin. Perhaps the word 'aesthetic' is added to cover space and time as well as empirical intuitions.

⁷ A 66 = B 91.

about empirical objects.¹ As such they may be said to *be* acts of pure thought,² the formal acts which are present in every judgement and are the same whatever be the particular objects thought. This statement remains true, whether the pure concepts in question have been explicitly conceived in philosophical reflexion or not.

It should also be noted that such pure concepts 'merely as acts of thought, would be related *a priori* to objects'.³ The reference to objects must not be overlooked. A pure concept is not merely a concept of the form of thought; it is a concept of the form of thought *as related to and determining an object*.⁴ The meaning of this will be explained later.⁵

We have still to prove that there are such concepts, but in anticipation of such a proof we say, provisionally, that the science which studies such concepts—or, to use a wider term, such cognitions—is Transcendental Logic.

Transcendental Logic studies 'the origin, the extent, and the objective validity of such cognitions'.⁶ It will show that there are *a priori* concepts distinct from space and time. It will, show also (1) that they are due to the nature of thought; (2) that they apply only to what is given to sense; and (3) that they are necessarily valid of all objects given to sense. The first point is concerned with origin, the second with extent, and the third with objective validity. ✓

These pure concepts of the understanding are called 'categories'. They are *a priori* in the sense of being necessary and universal. If concepts are properly called categories, they must apply to all objects without exception;⁷ and to speak as if

¹ For example, when we say 'This house is large', we are applying the category of substance and accident.

² It would be more exact to say that they are manifested in, or constitute the common character of, such acts of pure thought.

³ Similarly in A 51 = B 75 Kant says that the pure concept contains the form of thought of an *object in general*.

⁴ See B 128-9.

⁵ Compare Chapter XII § 6.

⁶ A 57 = B 81.

⁷ This is why they are said to contain the form of thinking of an object *in general*. Indeed we shall find that they may be called concepts of an object *in general*.

categories could apply to some objects, and not to others, is a contradiction in terms.

It may be objected that each category applies only to a particular kind of object, for example, that the category of cause and effect applies only to events. But an event is not an object in the strict sense; it is only a change in the accidents of a substance, and not itself a concrete thing. For Kant an object is a concrete thing, and every concrete real thing, so far as it can be experienced, must fall under all the categories: it must be a substance possessed of quantity and quality and interacting with other substances in accordance with the laws of cause and effect. We can no doubt consider different determinations and relations of an object in abstraction, but they are nevertheless only determinations and relations of an object, and not, properly speaking, objects themselves.¹

If Transcendental Logic is to prove that a number of categories necessarily apply to all objects given to sense, it will have to establish a series of necessary and universal synthetic propositions. These propositions are called 'Principles'; and to speak of Transcendental Logic as a science of pure concepts does not mean that it considers concepts only and ignores principles.

§ 3. *Transcendental Knowledge*

The use of such phrases as 'Transcendental Aesthetic' and 'Transcendental Logic' calls for some explanation of the meaning of the word 'transcendental'; and Kant at this stage²

¹ The view that I have taken is sometimes questioned, but it seems to me the only one that will make sense of Kant's doctrine. I have not found any absolutely unambiguous statement of it in the *Kritik* itself, but such a statement can be found in *Nachlass* 5932 (XVIII 391). If it be objected that this destroys the connexion between the categories and the forms of judgement, since the latter are alternatives, I can only reply that this is not true of the main divisions of the forms of judgement, and that I believe the theory at the back of Kant's mind is that all the forms of thought must be present in every judgement (and even in every conception); compare the identification of the form of the concept and the form of thought in A 239 = B 298.

² A 56 = B 80-1.

attempts to state what he means by calling knowledge 'transcendental'. His statement is unduly complicated,¹ and I will attempt to explain his doctrine more clearly.

While all transcendental knowledge is necessarily pure, it is not to be supposed that all pure knowledge is transcendental. Transcendental knowledge is knowledge of a critical or reflective or philosophical type; that is to say (it is knowledge that knowledge is pure or *a priori*). Thus the Transcendental Aesthetic is transcendental, since it shows that our intuitions of space and time are pure; and Transcendental Logic is transcendental, since it shows that the human mind possesses certain pure concepts or categories. Mathematical knowledge, on the other hand, is pure or *a priori*, but not transcendental: only the knowledge that mathematics is an *a priori* science can be called transcendental.

So far, to speak of knowledge as transcendental indicates only that such knowledge is a philosophical theory of the *a priori*; but I think we must also say it indicates that such knowledge is Kant's own philosophical theory of the *a priori*. On Kant's view *a priori* knowledge is possible only if it has its origin in the nature of the mind; and a transcendental theory² is a theory which attributes the origin of *a priori* knowledge to the mind.³

¹ Thus transcendental knowledge is said to be knowledge 'that and how' certain ideas (1) are *applied a priori* or (2) are *possible a priori*. This looks as if there were four things to be known transcendentially. A parenthesis suggests that these can be reduced to two: (1) the possibility, or (2) the applicability, of *a priori* knowledge. As possibility means real (not logical) possibility here, I am inclined to think that 'possibility' and 'applicability' mean the same thing. Later on transcendental knowledge becomes knowledge (1) that certain ideas are pure, and (2) (although even the grammar is hard to follow) how it is possible to apply them *a priori*—the word 'possibility' now referring clearly to the possibility of their application. (1) and (2)—or 'that' and 'how'—then refer to the Metaphysical and Transcendental Deductions respectively.

² I use the word 'theory' only to avoid a continual repetition of the word 'knowledge'. For Kant this theory is knowledge.

³ Or which attributes the origin of an *element* in a *a priori* knowledge to the mind. Kant habitually uses 'knowledge' or 'cognition' (*Erkennt-*

We have seen in the case of space and time—and I believe it holds of the categories as well—that our *a priori* knowledge has not only a kind of internal necessity,¹ but also a necessary applicability to objects. This necessary applicability, or *objective validity*, must also be considered by a transcendental theory of the *a priori*.²

There is yet another point. A theory which attributes the origin of *a priori* knowledge to the mind will be forced, Kant believes, to conclude that the objects of which such knowledge is valid cannot be things as they are in themselves. (Hence a transcendental theory is a reflective theory of *a priori* knowledge which determines the extent and limits of such knowledge as well as its origin and objective validity.³)

It may be asked which of these many characteristics is the essential one in virtue of which a theory (or a piece of knowledge) is called 'transcendental'. I think we must reply that a theory is transcendental primarily because of its concern with the *origin* of our cognitions. It is because of our insight into 'origin' that we are able to determine 'extent' and 'limits', and even to determine 'objective validity'. A transcendental theory must deal with all these questions, but the cardinal question would appear to be that of origin.

nis) to indicate what is strictly only an element in knowledge. This seems to me reasonable enough and to offer no real difficulty to the intelligent reader: if Kant put the necessary qualifications into every sentence, the *Kritik* would be unreadable. Here, as always, it is our task to see the reality he is describing, and not to interpret his words in a merely mechanical way.

¹ The categories differ in certain fundamental ways from our intuitions of space and time, but nevertheless the unity of thought is supposed to differentiate itself into a necessary system of the forms of judgement and so of the categories.

² In the Aesthetic Kant's argument was that the combination of internal necessity and objective validity in *a priori* knowledge is possible only if the origin of such knowledge is to be found in the nature of the mind. In the Analytic the objective validity of the categories has to be 'deduced' or justified. In the Dialectic it is maintained that the Ideas of reason have no objective validity.

³ We have already seen, in §§ 1-2 above, that such are the characteristics of Transcendental Logic.

I have tried to state the position as simply as possible, but we must not wholly overlook the many complications which it involves. The *a priori* knowledge with which a transcendental philosophy is concerned is not only *a priori* knowledge proper, such as is to be found in mathematics and in the presuppositions of physics.¹ It covers also what merely professes to be *a priori* knowledge, namely, the metaphysical doctrines of the rationalists. Above all, it covers what is only an element in *a priori* knowledge, namely, our pure intuitions (of space and time) and our pure concepts (including both the categories of the understanding and the Ideas of reason). Indeed it is primarily our pure intuitions and our pure concepts whose origin is attributed by a transcendental philosophy to the nature of the mind; and our whole view of *a priori* knowledge (whether genuine or illusory) is determined by such attribution.

Since our pure intuitions and pure concepts, together with the capacities or powers in which they originate, are for Kant the necessary conditions of all *a priori* knowledge and indeed of all experience, transcendental knowledge may also be described as knowledge of the *necessary conditions of experience*.² We may put this otherwise by saying that (transcendental knowledge is knowledge of what is logically prior to experience) or of 'what goes *before* all experience (*a priori*)'. It is to be distinguished from 'transcendent' knowledge which is (or claims to be) knowledge of 'what goes *beyond* all experience' to the super-sensible or to the thing-in-itself.³

¹ Such as (in the eighteenth century) that every event must have a cause.

² This statement would require some qualification to cover the special case of Ideas of reason.

³ See *Prol. Anhang* (IV 373 n.). 'The word "transcendental" means . . . not something which goes beyond all experience, but something which goes before all experience (*a priori*).' It would be better to say that the word 'transcendental' as applied to knowledge indicates knowledge, not of something which goes beyond all experience, but of something which goes before all experience *a priori*. Kant, however, applies the word 'transcendental', not only to knowledge of the necessary conditions of experience, but also to these necessary conditions themselves.

The question naturally arises why Kant should use the word 'transcendental' to describe knowledge of this kind. Any answer to this question would be a matter of conjecture. In the time of Kant the word seems to have been used very vaguely, and was more or less equivalent to 'metaphysical.'¹ He adapted it to his own purposes, and gave to it the meaning which I have explained. If we find it helpful to think of transcendental knowledge as knowledge of that which transcends experience *as its necessary condition*, I do not see why we should refrain from doing so.

; [It should not, I think, either surprise or confuse us that Kant also applies the word 'transcendental' to the necessary conditions of experience themselves, so far as these have their origin in the nature of the mind.² There is much greater danger of confusion if the word is used also to mean 'transcendent'.³ We have already seen one examp. t⁴ in which this is alleged to be the case—the transcendental ideality of space and time. We have now to consider another example, which is more troublesome.]

§ 4. *The Transcendental Use of Knowledge*

Transcendental knowledge, so far as it is knowledge of the necessary applicability of an *a priori* idea, is knowledge of the *use* of such an idea. Kant therefore thinks it necessary to point

¹ The word seems to be derived from the schoolmen, who spoke of certain concepts—*ens, res, aliquid, unum, verum, bonum*—both as *transcendentia* and as *transcendentalia*, on the ground that they transcended the categories. This doctrine has its root in Aristotle; see Ross, *Aristotle*, p. 156.

² For example, in phrases like 'the transcendental unity of apperception' and 'the transcendental synthesis of the imagination'. These also, although they are immanent in experience, may be said to transcend experience, not in the sense of going beyond experience to the super-sensible, but in the sense of 'being conditions logically prior to experience. Compare B 151.

³ 'Transcendent knowledge' should be knowledge of what goes *beyond* experience, and anything which is 'transcendent' should be something which goes *beyond* experience.

⁴ Chapter VI § 9. I do not think that this example by itself is conclusive.

out that the *use* of the idea may itself be transcendental.¹ The sense in which 'transcendental' is applied to the *use* of an idea² is different from the sense in which it is applied to knowledge itself; and this may easily be a source of confusion.

The use of an *a priori* idea is *transcendental*, if the idea is applied to things in general or things-in-themselves:³ its use is *empirical*, if the idea is applied to sensible objects or objects of a possible experience. The transcendental use is always illegitimate; it is a misuse or abuse.⁴ Thus the category of cause has, according to Kant, an empirical use only: we can say that it must govern all objects given to sense in space and time. If it is applied to things-in-themselves, this is a transcendental and illegitimate use of the category.⁵ Similarly, if space is treated as a form of sensibility applying only to objects of outer sense, its use is empirical, although it itself is a pure intuition. Its use would be transcendental and improper, if the reference to sense were removed, and if space were treated as applying to things-in-themselves.

The *character* of an idea and its *use* are therefore quite

¹ A 56 = B 81. Compare A 139 = B 178 and A 238 = B 297-8, and see also Chapter LIV. He does this without the slightest warning that 'transcendental' is here used in a different sense.

² Or to the use of a power of the mind. See e.g. A 180 = B 223 and A 257 = B 313 for the transcendental use of understanding, and A 131 = B 170 for the transcendental use of reason.

³ A 238 = B 298. In Kant's copy of the *Kritik* (see *Nachträge* CXVII) 'things in general and in themselves' is corrected to 'objects which are given in no intuition, and therefore are not sensible objects'. In A 56 = B 81 the idea is said to be applied to 'objects in general', but in this connexion 'objects in general' is equal to 'things in general', and covers things-in-themselves.

⁴ A 296 = B 352. Note, however, that in A 94 Kant seems to speak of a legitimate use of the *powers* of the mind, which he nevertheless describes as transcendental. The statement in A 131 = B 170 (that the transcendental use of reason is never objectively valid) seems also to imply that there is a transcendental use of understanding which is objectively valid. 'Transcendental use' would here seem to be use in determining the conditions of experience, and so in determining the objects of experience.

⁵ Compare A 180 = B 223; also A 146 = B 185, A 238-9 = B 298, A 242, B 406, A 711 = B 739.

different things. Although an idea is itself pure or *a priori*, its use may be, and indeed ought to be, empirical. Such use, although empirical (in the sense of concerning only objects of possible experience), is still necessary and universal, for the idea necessarily applies to *all* objects given to sense.

This meaning of 'transcendental' seems to have little or nothing to do with the meaning of 'transcendental' when applied to knowledge. Kant's exposition would have been simpler, if he had spoken of the 'transcendent' and 'immanent' use¹ of ideas in place of the 'transcendental' and 'empirical' use.²

§ 5. *Can Transcendental Logic supersede Formal Logic?*

It is often said that Transcendental Logic must supersede Formal Logic,³ although Kant failed to grasp this necessary consequence of his own doctrine.

To such a view there are obvious objections. Even if Transcendental Logic were generally accepted as true—and this is far from being the case—it would still remain a logic which studied only a special kind of thinking, namely, synthetic *a priori* thinking. There must always be a logic which studies thinking in general; and although we may hold that such a logic cannot be purely formal in Kant's sense, and that it must

¹ Compare A 308 = B 365.

² Kant may be unconscious that he is employing 'transcendental' in two senses. When he speaks of 'transcendental use', he perhaps employs the phrase vaguely (for example, as meaning a use independent of experience), and he may have no sharply defined idea that such a use 'goes beyond experience'. I have found, however, one place where Kant says explicitly that a transcendental use is one going beyond the limits of experience (A 296 = B 352-3). This seems definitely to show that here 'transcendental' is equivalent to 'transcendent'; but even in this passage Kant avoids such identification by defining 'transcendent' in an unusual way. A principle is said to be 'transcendent', not if it merely goes beyond the limits of experience, but if it takes away these limits, or commands us to transgress them. For 'transcendent', see also A 781 = B 809.

³ See, for example, Kinkel, in his introduction to Kant's *Logik* (*Phil. Bib.* 43, p. xvi). This seems to rest partly on the view that Formal Logic studies only analytic judgements and partly on the view that analytic judgements have no object. Both of these views are, I believe, false.

take into account the matter of thought, Transcendental Logic could, at the best, be only a part of such a general logic and not the whole. Furthermore Transcendental Logic is mainly concerned with metaphysical questions, and in spite of views to the contrary I cannot see any advantage to be gained by ignoring the distinction between logical and metaphysical enquiries. It is no part of the task of logic to prove that every event must have a cause, and there is much in Kant's Transcendental Logic which can have no place whatever in general logic.

♦ The most we can say is that Kant's doctrines call for a reconsideration of the nature of Formal Logic, and suggest the possibility of a more philosophic and less formal, but still general, logic, in which some Critical theories might find a place. He professes to show, for example, that there is an element of synthesis present in all judgements, and that this element of synthesis is necessary for all knowledge of objects. If these theories were accepted, we might say that any logic which ignored them was condemned to superficiality; but to say this is very far from saying either that the *Kritik of Pure Reason* can be a substitute for general logic or that it can be wholly absorbed into a general logic. It is also very far from saying that the doctrines of Formal Logic ought to be abandoned.

§ 6. *Divisions of Transcendental Logic*

Transcendental Logic isolates understanding, as Transcendental Aesthetic isolated sensibility.¹ This isolation or abstraction is, however, less likely to mislead us, because of what has gone before. We have to bear in mind—though this will become clearer as we advance—that the use of such *a priori* cognitions as are derived from thought is possible only on the condition that objects are given to us in intuition.²

¹ A 62 = B 87; A 22 = B 36.

² This is not obvious at first sight, and Kant always recognises that there is a claim in pure thought to go beyond objects of sense. He rejects this claim on the ground that such thinking is, for human beings, empty and meaningless.

Transcendental Logic, like Formal Logic, is divided into a Doctrine of Elements and a Doctrine of Method.

The Transcendental Doctrine of Method determines the formal conditions of a complete *system* of pure reason.¹

The Transcendental Doctrine of Elements is divided into a Transcendental Analytic and a Transcendental Dialectic, in this respect also following the divisions of Formal Logic.

The Transcendental Analytic analyses out of our whole *a priori* knowledge the elements which belong to pure understanding—the elements belonging to pure intuition being already determined.² In this respect it is parallel to the Analytic of Formal Logic, which analysed the whole business of thought (so far as that is formal) into its elements.³

The Transcendental Analytic will establish the categories and principles without which no object can be thought. It determines positively the conditions under which any and every object of knowledge must necessarily be *thought*, if it is to be an object; just as the Transcendental Aesthetic established the conditions (the forms of sensibility) under which any and every object must be *given*, if it is to be an object.

If this claim is justified, any professed cognition inconsistent with the Principles of the Transcendental Analytic would have no reference to any object, and would therefore have no truth—for truth is always the correspondence of thought with its object. Hence the Transcendental Analytic is a logic of truth.

We are, however, tempted to extend the use of these Principles beyond the limits of sensuous experience. We forget that formal principles derived from the understanding, though they must apply to any object which we can think, require this object to be given to sense: they cannot produce an object out of themselves. Because we forget this, we apply, for example,

¹ A 707-8 = B 735-6. The *Kritik* itself is not to be regarded as such a system; A 14 = B 28, A 81-2 = B 107.

² A 64 = B 89. Kant himself says that the Transcendental Analytic analyses our whole *a priori* knowledge into the elements which belong to pure understanding; but this seems a less exact statement, although it gives a better parallel.

³ A 60 = B 84.

the pure concept of substance to supposed objects which are not, and perhaps cannot be, given to our senses.¹

In doing so, we cease to use our *a priori* principles as a canon, or *conditio sine qua non*, by which to criticise our empirical judgements about experienced objects. We use them instead as an organon or tool for extending our knowledge to objects given in no experience. This misuse of pure understanding is dialectical, and is a source of illusion.

The Transcendental Dialectic is a criticism of this dialectical illusion, of this misuse of pure understanding or pure reason beyond the limits of what is given to sensuous experience. As such it is a criticism of rationalist metaphysics.

The dialectical error in Formal Logic, it should be noted, is to use the formal principles of logic as if they gave us information about any kind of object.² The dialectical error in Transcendental Logic is to use the Principles of Transcendental Logic as if they gave us information about non-sensible objects.

§ 7. Kant's 'Architectonic'

It is a common criticism of Kant that he attempts to force the contents of the *Kritik* into an artificial and external framework borrowed from Formal Logic. This general plan or framework is described as Kant's 'architectonic', and his love of architectonic is alleged to distort his thinking.

I believe this contention to be grossly exaggerated, at any rate as regards the Analytic, but here I wish only to call attention to the fact that Kant is very far from making the divisions of Transcendental Logic follow those of Formal Logic in any

¹ Compare A 96. Kant says, in A 63 = B 87-8, that to do this is to make a material use of merely formal principles of pure understanding. Here again he seems to identify the matter or content of thought with its objects (see Chapter IX § 4). Yet it must be remembered that although pure concepts have as their content or matter the form of thought, they require a further matter derived from intuition if they are to have objective validity.

² This is what Kant believed Leibniz to have done. See the Amphiboly of the Concepts of Reflexion, A 260 = B 316 ff.

slavish manner. On the contrary, there are marked divergences between the divisions of the two logics, and these are due to the differences in the nature of the problems dealt with in these sciences.

In the Transcendental Analytic there are two divisions: (1) The Analytic of Concepts and (2) the Analytic of Principles (called also the Transcendental Doctrine of Judgement). The first of these deals with the pure concepts of the understanding, the second with the Principles based upon these concepts. We have already seen, and we shall see more clearly in the sequel, that these two divisions are forced upon Kant by the nature of his subject-matter. They are indeed parallel to the two divisions in the Analytic of Formal Logic which deal with concepts and judgements, but they perform very different functions;¹ nor is there anything artificial or surprising in the fact that both Formal and Transcendental Logic should deal separately with concepts and with judgements.

The divergences in the division of the two logics are of greater importance than the similarities.

The Analytic of Principles has, as its First Part, a chapter on the Schematism of the Categories. There is nothing corresponding to this in Formal Logic, as Kant himself points out.² How it can be ascribed to the artificial influence of Kant's 'logical architectonic', I fail to understand.

Furthermore, the Analytic of Formal Logic contains three divisions. It is an analytic of concepts, judgements, and inferences.³ The third division is concerned chiefly with the syllogism and gives us a canon of reason. *There is nothing corresponding to this third division in the Transcendental Analytic.*

¹ In Formal Logic the two divisions are concerned respectively with the form of all concepts and the form of all judgements. In Transcendental Logic these two divisions give us firstly, a list of the categories and a general justification of their objective validity; and, secondly, a demonstration of the separate *a priori* judgements or principles based upon each of the categories.

² A 135-6 = B 174-5.

³ A 130 = B 169. The powers concerned are understanding (in the narrower sense), judgement, and reason.

The cause of this difference is clear enough. The Analytic of Formal Logic, since it is concerned with the form, and not with the matter, of thought, can give an account of what reasoning must be if it is to be formally correct. The Transcendental Analytic is not concerned with formal validity, but with truth. There is an objectively valid—or, as Kant calls it, true—use of *understanding* and *judgement* as sources of *a priori* knowledge, and of this the Transcendental Analytic can supply a canon; that is, it can show that the categories which originate in the understanding are pure concepts without which no objects can be thought, and that their application to objects of experience must be valid. There is no such objectively valid use of *reason*;¹ for the Ideas which have their origin in reason, and by means of which reason attempts to extend our knowledge beyond the limits of possible experience, have no relation to any object which can be given as congruent with them.²

Hence the transcendental account of reason is not to be found in the Transcendental Analytic, which is a logic of truth, but in the Transcendental Dialectic, which is a logic of illusion.³

✓ The main divisions of Transcendental Logic are not distorted to fit an artificial framework derived from Formal Logic.⁴ They are, on the contrary, determined by the nature of what professes to be synthetic *a priori* knowledge.

§ 8. *The Transcendental Analytic*

The Transcendental Analytic, as we have seen, seeks to determine what, if any, are the elements in our *a priori* knowledge which ought to be attributed to pure understanding.⁵

As understanding is, in the first instance, a power of con-

¹ This is called a transcendental use; A 131 = B 170. Compare § 4 above.

² Compare A 336 = B 393.

³ A 131 = B 170. It may also be observed that the division of the Transcendental Dialectic into two books, the first of which deals with the concepts of pure reason and the second with the dialectical inferences of pure reason, is not determined by the framework of Formal Logic.

⁴ Adickes in his earliest book—*Kants Systematik*—carries this theory to absurdity.

⁵ A 64 = B 89.

ceiving, we may assume, to begin with, that it will be a source of concepts. If we are to find concepts of the type required, they must be pure and not empirical; and they must be due to thought, not derived from intuition. They must not be derived even from pure intuition, as are temporality and spatiality. Further, we are concerned only with primary, not with derivative, concepts. Lastly, if we are to have a true science, the table of these concepts must be complete.

If we are to be sure that the table is complete, it must be derived from one Idea¹ of the whole of our *a priori* knowledge, so far as that is due to pure understanding. This Idea of the whole must be *a priori* in the sense of being the idea of a whole which articulates itself necessarily into a complete system of pure concepts.

The possibility of having such an Idea of the whole system of pure concepts depends upon the fact that the understanding, considered apart from everything empirical and sensible (even apart from pure intuition), is a self-subsistent and self-sufficient unity.²

This doctrine—the doctrine that the unity of thought differentiates itself necessarily into the forms of judgement and so into the categories—will become clearer to us as we advance.

§ 9. *The Analytic of Concepts*

The First Book of the Analytic is the Analytic of Concepts. It is not concerned with the analysis of concepts, such as is necessary to give them 'distinctness'. On the contrary, it is an analysis of the power of understanding itself in order that we may find whether pure concepts are necessarily involved in its activity.³ Here once more we have the two characteristics of a transcendental theory, that it (1) recognises the *a priori*

¹ An 'Idea' is used in a technical sense for the concept of a science as an articulated system, and is 'architectonic' in Kant's sense of the word. See A 832 = B 860.

² A 64 = B 89; A 67 = B 92.

³ A 65-6 = B 90. The very clear statement in A 66 = B 91 that pure concepts are 'developed' only on the occasion of experience should be specially noted.

character of certain ideas, and (2) explains this as due to the nature of the knowing mind.

* [The Analytic of Concepts is divided into two main parts, and each of these is, in the first edition, divided into three sections.¹

The first main part is entitled 'The Clue to the Discovery of all Pure Concepts of the Understanding'. This is referred to in the second edition² as the 'Metaphysical Deduction', and this title may be used for the sake of brevity. The second main part is headed 'The Deduction of the Pure Concepts of the Understanding', and may be called the 'Transcendental Deduction' proper, though the whole argument from beginning to end is, it need hardly be said, a transcendental argument.

We have, therefore, a Metaphysical and a Transcendental Deduction of the categories corresponding roughly to the Metaphysical and Transcendental Expositions of space and time.³ }

§ 10. *The Metaphysical and Transcendental Deductions*

Before examining the Deductions in detail, it is necessary to consider what Kant himself has said about them as a whole.

¹ It is important for beginners to read the first edition entirely by itself, and above all to grasp clearly the differences between the various parts and sections which form the skeleton of Kant's thought.

² B 159.

³ I do not think that much importance should be attached to the description of the First Book of the Analytic of Concepts as a Metaphysical Deduction. This is an afterthought probably suggested by the distinction between Metaphysical and Transcendental Expositions in the Aesthetic, a distinction which is itself an afterthought. The more modest description of this book as 'The Clue' is in some ways preferable.

For an explanation of the meaning of the word 'Metaphysical' in this connexion, see Chapter V § 2. As I have suggested there, the Metaphysical Deduction may be said to consider the categories *in themselves*, and the Transcendental Deduction to consider them in relation to *other* knowledge. The Metaphysical Deduction might also be said to determine the number and nature of the categories by an analysis of judgement taken *by itself*, and the Transcendental Deduction to show that judgement, by means of the categories, is also a source of *a priori* knowledge of objects.

In the Metaphysical Deduction the *a priori* origin of the categories is established by their perfect agreement with the universal logical functions (that is, forms) of thought. In the Transcendental Deduction what is shown is their *possibility* as *a priori* cognitions of objects of intuition.¹ More precisely, the Metaphysical Deduction is concerned with determining the *list* of the categories, and explaining their *origin* in the nature of the understanding. The Transcendental Deduction, which is a justification rather than a deduction, shows how it is possible, and indeed necessary, for categories of such an origin to apply to objects given in intuition. It is, in short, concerned with their *objective validity*, and so with their *extent* and with the *limits* of their legitimate use.

In the preface to the first edition² Kant calls special attention to the Transcendental Deduction as of the utmost importance for the theory of knowledge, and asserts that it has cost him more pains than any other portion of his work—a statement not easily reconciled with Vaihinger's theory as to its composition.

The Transcendental Deduction, he adds, has two sides, a subjective side and an objective side. He even speaks as if there were two deductions, a Subjective Deduction and an Objective Deduction.³ The Subjective Deduction is of great importance, but it is the Objective Deduction which is essential. Kant expresses his own complete confidence in the Subjective Deduction, but recognises that the reader may be inclined to regard it as a mere hypothesis or opinion. Even so, he insists, the Objective Deduction is adequate and conclusive by itself.

In view of such an emphatic statement, it is our duty to concentrate on the objective side of the Deduction. To treat

¹ B 159. In this passage Kant speaks of the Transcendental Deduction as concerned with objects of intuition *in general*, and deals later with objects of human intuition, but this point does not concern us here. The possibility in question is what Kant calls 'real' as opposed to 'logical' possibility; see BXXVI n. and compare Chapter XLIX § 4.

² A XVI.

³ A XVII.

the Deduction as if its main concern were with the subjective side, is to give a distorted view of Kant's thinking.

§ 11. *The Subjective and Objective Deductions*

✓The primary question of the Transcendental Deduction is concerned with the *objects* of the pure understanding. It asks 'What and how much can understanding know independently of experience?' Its aim is to prove and make intelligible the *objective validity* of the categories; and this, Kant believes, is done adequately in A 92-3 = B 124-6, taken by itself.¹ This fundamental argument is the Objective Deduction, which however is by no means confined to the passage mentioned.

✓The Subjective Deduction, on the other hand, is concerned with pure understanding itself, with its possibility, and with the powers of cognition upon which it rests. It is said to ask 'How is the power of thinking itself possible?'² I should prefer to say that it asks how the power of thinking can be a power of *a priori knowledge*, and it professes to show how this is possible through the co-operation of imagination and sense.³

It is our business to keep separate in our minds the Metaphysical Deduction, and the subjective and objective sides of the Transcendental Deduction. This is the more necessary because Kant himself does not separate the Subjective from the Objective Deduction, at any rate in the first edition. It is even doubtful where we are intended to draw the line between the two. All references to imagination are a sure sign that we are dealing with the Subjective Deduction. It is not so clear whether the references to human sensibility and the form of time⁴ are intended also to belong to the Subjective

¹ A XVII.

² I do not think that this question properly indicates Kant's problem, which is concerned rather with knowledge of objects than with mere thinking.

³ Compare A 97.

⁴ If the reference to time is removed from the Objective Deduction, the Objective Deduction is incomplete; for the pure concepts would

Deduction. I am inclined to think that they are meant to do so in the second edition, when Kant had thought out his position more clearly.

then be empty. Kant himself points out this incompleteness in B 144-5. As the Objective Deduction in the first edition is supposed to be complete in itself, presumably the account of time must there be reckoned as part of the Objective Deduction: but it is difficult, if not impossible, to consider the part of time without bringing in imagination and sense; and the argument of A 92-3 = B 124-6, which is said to be adequate on the objective side, does not appear to rest on the nature of time.

BOOK IV

THE METAPHYSICAL DEDUCTION
OF THE CATEGORIES

CHAPTER XII

CONCEPTION AND JUDGEMENT

§ 1. *Divisions of the Metaphysical Deduction*

The Metaphysical Deduction, as was pointed out above, is composed of three sections. Of these the first deals with the logical use of the understanding in general, the second with the forms of judgement, and only the third with the categories.

This means that the third section alone deals with the special problem of Transcendental Logic, and is the Metaphysical Deduction proper. The first two are preparatory, and strictly speaking belong to Formal, or at any rate to General, Logic, as is suggested by their very titles. In particular, the use of the understanding *in general* can be discussed only in General Logic, and furthermore this *use* is explicitly said to be *logical*.¹

Nevertheless even in the second section, whose contents we have already discussed,² we found considerations introduced which belonged to Transcendental Logic, and I think this is true, to some extent, of the first section also.³ The very obscurity of the first section is an indication of this, for when Kant is expounding a traditional view he is generally clear.

§ 2. *The Meaning of 'Function'*

The obscurity of the first section is due partly to the fact that Kant gives us no help as to the stages into which his argument is divided, and partly to his use of the word 'function'

¹ The 'logical use' of the understanding is not to be taken as a special use confined to a special kind of judgement, but as the general or formal use present in all judgements and studied by Formal Logic.

² Chapter X § 1.

³ The doctrine that sensibility is receptive and understanding spontaneous (or active) is metaphysical, not logical; compare *Log. Einl.* V (IX 36).

in different senses. With very little trouble Kant could have made this section much easier.

Thus he asserts (1) that functions of unity are to be found *in* judgements; (2) that judgements *are* functions of unity; and (3) that a function *is* the unity of an act which (I believe) is judgement. Any attempt to interpret these statements mechanically is bound to produce as pretty a mess as one could wish to see.

In its primary sense (the 'function' of anything is that work which it alone can do, or which it can do best.¹ Thus it is the function of a boat to sail, and of a pruning-knife to prune; for only a boat can sail, and although it is possible to prune with other things than a pruning-knife, a pruning-knife is the instrument which does this best.) The word is, however, applied especially to the work appropriate to organs of a living body. It is, for example, the function of the eyes to see.

(In this sense the function of the understanding is to think or to judge)

The word 'function' is, however, used also, not for the work which a thing performs, but for its way of working, or, in the language of the dictionary, for the 'mode of action by which it fulfils its purpose'. The function is then a common nature, or a common *form*, present in the separate acts.

However this may be, Kant, when he speaks of understanding and judgement, uses the word 'function' as synonymous with the word 'form'. The functions of understanding are the same—at any rate in their denotation—as the forms of understanding; and the functions of judgement, or the functions in judgement, are the same as the forms of judgement.² (The general *function*

¹ Compare Plato's account of *εργον*, *Republic*, 353a, and also Aristotle, *Eth. Nic.* 1097b.

² Note especially A 70 = B 95, at the beginning, where the 'form of understanding' is equivalent to 'the function of thought in judgement' and to the 'logical function of the understanding in judgement'. This use of 'function' as equal to 'form' is, I think, found only where we are concerned with an activity. Kant never, to my knowledge, speaks of a function of intuition, but only of a form of intuition, since intuition is passive.

of the understanding, namely judgement, is supposed to differentiate itself into the necessary forms of judgement, and these are identified with the *functions* of the understanding.

It is important, and not always easy, to distinguish which of these two senses of 'function' Kant is using. Unfortunately the only definition which he gives of 'function' is by no means clear. 'By "function"', he says, 'I mean the unity of the act of ordering different ideas under one common idea.'¹ He is referring to the word 'function' only as it is used in connexion with understanding, and the 'act' spoken of must, I think, be the act of judgement itself.² In that case the 'unity of the act' would seem to mean 'the form of the judgement', and this is how it is understood by Mellin.³ The form of the judgement is the way in which the judgement unites ideas, and thus the form or function of the judgement is identified with its special kind of unity.⁴

It is embarrassing when Kant applies the word 'function', not to the forms of judgement, but to individual judgements themselves. ('All judgements are functions of unity in our ideas.'⁵ I take the statement to mean that judgements are acts whose essential task or function is to produce unity in our ideas.⁶

¹ A 68 = B 93. A 'common idea' is a '*conceptus communis*'. Compare *Log.* § 5 *Anmerk.* (IX 94) and B 133-4 n. The 'act' is an act of analysis, not of synthesis.

² This is suggested both by the description given of the act and by the fact that all acts of the understanding can be reduced to judgement; see A 69 = B 94.

³ *Marginalien*, p. 22.

⁴ This identification is possible only because judgement is an act. The form of intuition, which is passive, is, apart from synthesis, a mere multiplicity, since unity cannot be given in intuition. See B 160 n.

Even so, we may feel some difficulty at the identification of the unity of the act with the way in which it produces unity in ideas, and consequently with its form. This type of difficulty will recur frequently as we advance.

⁵ A 69 = B 94. This is, I think, loose terminology which ought to be avoided. Note also that a function of unity is apparently a function productive of unity, whereas a function of understanding is a function which understanding performs.

⁶ Compare Mellin, *Encyclopädisches Wörterbuch*, II, p. 687.

Kant combines this statement with another which implies, more correctly, that the *forms* of judgement are 'functions of unity in judgements'.¹ It would be better to say that a judgement is essentially an act of uniting our ideas; and that the *forms* of judgement are the *different ways in which* 'judgement unites our ideas, so far as these ways' are determined by the nature of thought and not by the special nature of the ideas themselves.

When these different senses of the word 'function' are distinguished, Kant's argument becomes easier to understand.²

★§ 3. *Outline of the Argument*

The main stages of the argument seem to be as follows:

1. Understanding is a power of knowing by means of concepts.³
2. To know by means of concepts is to judge.⁴
3. To judge is essentially to unite our ideas.⁵
4. The different ways in which judgement unites our ideas (independently of the nature of the ideas themselves) are the forms of judgement as stated by Formal Logic.⁶

¹ The fact that 'function' and 'unity' were previously identified is a further cause of embarrassment. The form or function would now seem to be regarded as the *source* of unity in judgements.

² At times Kant seems to use 'function' as equivalent to a power or faculty. For example, he speaks of imagination as a 'blind function' of the soul; A 78 = B 103.

³ A 68 = B 93: 'The knowledge yielded by every understanding, or at least by every human understanding, is by means of concepts.' This 'knowledge' is rather an element in knowledge: it might be called 'thinking'. Compare *Log.* § 1 (IX 91): 'Knowledge through concepts is called thinking (*cognitio discursiva*)'.

⁴ A 68 = B 93 and A 69 = B 94. 'The only use understanding can make of these concepts is to judge by means of them.' 'We can reduce all acts of the understanding to judgements.'

⁵ A 69 = B 94. 'All judgements are functions of unity among our ideas.'

⁶ This is not said explicitly, but is assumed. Compare Chapter IX §§ 1-3.

5. Consequently the complete list of the forms of judgement is a complete list of the different ways in which understanding unites ideas by means of judgement; that is to say, it is a complete list of the functions of the understanding.¹

The interest and importance of the passage depends, not so much on its obvious conclusion (granting Kant's pre-suppositions), as on the doctrine of the concept and the judgement which is implied in it.

§ 4. *The Concept*

Concepts are grounded on the spontaneity of thought, as sensuous intuitions are grounded upon the receptivity of sense.² What does this mean?

According to Kant, a creative intelligence is conceivable, which by its own activity would create intuitions; these would be what he calls intellectual intuitions. Human beings receive their intuitions passively. This is why human intuitions are called sensuous, and are said to be grounded on receptivity.³

Concepts, on the other hand, are due to the activity or spontaneity of understanding. In other words, understanding produces concepts,⁴ and concepts spring from understanding.⁵ This tells us nothing as to the way in which understanding produces concepts, but we have seen⁶ that concepts are made, *as regards their form*, by comparison, reflexion, and abstraction.⁷ This is the account offered by Formal Logic.

¹ A 69 = B 94. 'The functions of the understanding can, therefore, be discovered if we can give a complete list of the functions of unity in judgements.'

² A 68 = B 93. Kant says 'of impressions', but this destroys the parallelism with the spontaneity of thought. Compare also A 19 = B 33 and A 50 = B 74.

³ This receptivity is identified with sensibility in A 51 = B 75. For Kant 'sensuous' as applied to intuitions means 'passively received'.

⁴ In A 51 = B 75 Kant says understanding produces ideas, and these may perhaps include the ideas produced by imagination, but the ideas produced by understanding in the narrower sense are concepts.

⁵ A 19 = B 33.

⁶ Chapter IX § 6.

⁷ Log. §§ 4, 6 (IX 93, 94).

Kant may not intend to make his own view more precise when he informs us that intuitions, as sensuous, rest on affections, and concepts on *functions*; but, if so, it is odd that he goes on immediately to assert that by 'function' he means the unity of the act of ordering different ideas under one common idea.¹ This act is an act of judgement, and it looks as if 'function' is to be taken here in its technical sense as equivalent to 'form of judgement'.

I do not want to make too much of this, but in view of what follows² we are bound to consider such an interpretation. (Kant appears to be saying at least this, that the act of abstraction or *analysis*³ whereby we make a concept⁴ is a judgement;⁵ and if to conceive is essentially to think in abstraction what is common to a plurality of possible individual instances, his assertion seems to be true.⁶

¹ This common idea must be a concept.

² Especially in A 79 = B 104-5. It must be remembered that the whole of the present passage is offered to us as a preparation for the Metaphysical Deduction.

³ See again Chapters IX § 6 and X § 7 (at the end), and note the word '*analytisch*' in A 76 = B 102 and A 78 = B 104. It is all-important to recognise here that the act in question is the act of analysis (not the act of synthesis) which is present in all judgement as such.

⁴ If I am right, this is also the act present in *thinking* any concept.

⁵ It would seem to be a problematic judgement. Kant himself in A 75 n. = B 100 n. connects understanding as a power of conceiving with problematic judgements; and this view is supported by the doctrine that a concept is essentially the predicate of a possible judgement (A 69 = B 94). It will be remembered that understanding in the wider sense covers (1) understanding in the narrower sense (the power of conceiving), (2) the power of judgement (that is, of assertoric judgement), and (3) the power of reason (or judgement by mediate inference). See Chapter IX § 2.

⁶ A doctrine of this kind is already set forth in one of Kant's early works, *Die falsche Spitzfindigkeit der vier Syllogistischen Figuren* (II 58-9). The relevant passage is translated by Kemp Smith, *Commentary*, pp. 181-2. There Kant is dealing only with 'distinct' concepts (that is, concepts made up of 'marks' which are 'clear'); and he blames logicians for discussing 'distinct' concepts before dealing with judgements, although a 'distinct' concept is possible

The same doctrine seems to be implied in Kant's statement that all the acts of understanding can be reduced to judgement.¹ The obvious objection to this is that the act of conceiving is a different act from the act of judging. Kant meets this objection by asserting that it is as predicates of *possible* judgements that concepts relate to some idea (ultimately to some intuition) of an object *as yet* undetermined. Indeed he affirms that a concept is a concept only because it contains under it other ideas (ultimately intuitions), by means of which it can relate to objects.² This implies that it is a concept only as the predicate of a possible judgement.³

To say that concepts are essentially predicates of possible judgements is to say that conceiving is really judging. Concepts do not precede judgement, but rather are abstractions from judgement. If so, they must rest upon the form of judgement; and this may turn out to be of importance later.)

§ 5. *The Judgement*

Kant's discussion of concepts has as its immediate purpose the establishment of the conclusion that the functions of understanding are identical with the forms of judgement. This conclusion is reached (with the help of presuppositions drawn

only by means of judgement. He also maintains there that understanding and reason are ultimately the same power. Both are a power of judging, but reason is a power of judging mediately, that is, of inferring.

¹ A 69 = B 94.

² It should be noted that the predicate-concept is related to intuitions by means of the subject-concept. I do not examine this complication here, because we shall have to consider it presently in connexion with judgement.

³ Kant's principle holds even for concepts which are subject-concepts. In 'All bodies are divisible' the subject-concept is 'body', but 'body' is also the predicate of a possible judgement. See A 69 = B 94, and also *Nachlass* 4634 (XVII 616), where every judgement is said to have two predicates which we compare with one another. 'When I say "A body is divisible", this means: "something X, which I know through the predicates that together constitute a concept of body, I think also through the predicate of divisibility".'

from Formal Logic) on the ground that conceiving is judging; and that all the acts of the understanding can be reduced to judgement.

There is a further point to be made—that the functions of the understanding (or the forms of judgement) are the ways in which understanding *unites* ideas. Here again Kant takes his general doctrine of the forms of judgement for granted. His discussion of judgement is concerned, not with the separate forms of judgement, but with what he believes to be the general nature of judgement as a whole. If the essence of judgement is to unify, the different forms, it is assumed, will be the different ways of unifying.

The only use that understanding can make of concepts is to judge by their means,¹ and in judging we refer a concept to an object.² But no idea other than an intuition is immediately related to an object. Hence when in judgement we refer the concept to an object, we do so by means of intuition.

Judgement, therefore, since it must employ concepts, is discursive or mediate,³ and not intuitive,⁴ cognition.

So far I have spoken as if there were only one concept in a judgement, and as if this concept were referred to a sensible reality—a doctrine reminiscent of Mr. Bradley. Kant, however, recognises a distinction between subject and predicate, and consequently recognises what may be called a double mediation in judgement. The concept may refer to an object, not only by means of an intuition, but also by means of another concept. The predicate-concept is referred to the object by means of

¹ A 68 = B 93.

² Presumably also to a number (or to a class) of objects.

³ Kant expresses this by saying also that judgement is the idea of an idea of an object, and such a statement may seem artificial. It is, however, only another way of asserting that in judgement we refer a concept to an object by means of another idea (ultimately by means of intuition). Compare the account of thought in A 19 = B 33.

⁴ As we have seen, mathematical judgements may nevertheless be called intuitive, in the sense that in them intuition plays a prominent part. See Chapter X § 7.

the subject-concept, which is assumed to refer immediately¹ to the object.

✓ At this stage we approach the crucial point of Kant's discussion, namely the sense in which (according to Formal Logic) judgement is supposed to unify ideas.

Kant gives us an example of what he means. In the judgement 'All bodies are divisible', the concept of divisibility, which is applicable to other things² than bodies, is referred in particular to the concept of body, and the concept of body is referred to certain intuitions³ which present themselves to us. Taking this example as typical of all judgements, Kant asserts that every judgement is essentially an act which produces unity in our ideas.⁴ Instead of using an immediate idea⁵ (e.g. the subject-concept of 'body') for the purpose of knowing the object,⁶ it uses a 'higher idea' (e.g. the predicate-concept of 'divisibility') which comprehends⁷ under it the subject-concept and other concepts;⁸ and in this way many possible cognitions are gathered into one.

¹ This immediacy is of course only relative. The subject-concept can refer to the object only by means of intuition, but it refers directly to the intuition, whereas the predicate-concept is referred to the intuition by means of the subject-concept.

² Kant says 'other concepts', but the concept of divisibility strictly applies to the things thought under these concepts.

³ The text says 'appearances' (*Erscheinungen*), but this is obviously a slip or misprint corrected by Kant, *Nachträge* XXXVI. See edition of Raymund Schmidt, note on A 69 = B 93.

⁴ I express this in my own words. Kant says 'All judgements are functions of unity in our ideas'.

⁵ Kant does not say whether he means the strictly immediate intuition of a body or the relatively immediate concept of 'body'. I think he must mean, primarily at least, the latter. The concept of 'body' is relatively immediate because it is the subject-concept of the judgement in question.

⁶ There is no special significance attached to the singular 'object'. Compare the preceding sentence: 'These objects are mediately represented through the concept of "divisibility".'

⁷ 'begreift.' The word is appropriate to a concept (*Begriff*).

⁸ Here again Kant says simply 'that which comprehends under it this (immediate idea) and others'. He may be referring, not only to the subject-concept and other concepts, but also to the intuitions of divisible objects which fall under the concept of 'body' and other concepts as well as under the concept of 'divisibility'.

This statement is of cardinal importance for the argument, yet it is unfortunately obscure. In what professes to give a description of all judgements, we ought to consider judgements other than categorical,¹ even if we believe that hypothetical and disjunctive judgements are in a sense made up of categorical judgements.² As regards categorical judgements themselves, it is necessary to recognise that in them we may use our own ideas as objects,³ and that a mere abstraction may be the subject of a judgement. Kant's example is a very special kind of categorical judgement, in which not only does the subject-concept refer to concrete physical things, but the predicate-concept is taken to be 'higher'⁴ than the subject-concept; and this is by no means necessary.⁵

It must, however, be remembered that Kant is not writing a treatise on Formal Logic, and his theory may be sound even if his example is inadequate and is described in a way which does not fit the general case. What we really want to know is the sense in which 'many cognitions are gathered together in one' when we judge.

Every categorical judgement may be said to unite its subject and predicate, but this is manifestly not Kant's primary meaning. We have always to face the difficulty that he describes as cognitions, and even as intuitions, what on a realistic assumption would be described as things. I believe him to mean that instead of intuiting each body separately, we gather together our different *intuitions* of many individual bodies

¹ Compare B 141.

² Kant does believe this in a sense, but he considers that hypothetical and disjunctive judgements involve distinct forms of thought.

³ The object is here simply the subject of the judgement.

⁴ The term 'higher' or 'wider' is applied most appropriately to cases of genus and species. The concept 'animal' is higher than the concept 'man', and this in turn is higher than the concept 'negro'. We get a similar series in 'thing', 'substance', 'body', 'metal', 'iron'. 'Divisibility' is not a genus of which 'body' is a species, and 'body' is not contained under 'divisibility' as it is contained under 'substance'; it has, however, a wider denotation, and this may be the reason why it is here called higher. Compare *Log.* §§ 9-13 (IX 96-8).

⁵ E.g. in the judgement 'Some divisible things are bodies'.

under the concept of divisibility. More simply, we unite different individual bodies before our minds by means of their common mark of divisibility.¹ This we do by an act of analysis.

Kant's broad contention is this—that to judge is essentially to think a plurality of sensible individuals by means of universal or general concepts. (Just as he maintained that conceiving is judging, so now he maintains that judging (whatever else it is) is conceiving.) What we have to consider is this highly general doctrine: his account of the part played by the subject- and predicate-concepts clearly demands modification, if it is to fit all the different types of judgement.

Even the general doctrine is by no means free from difficulty. Yet I do not see that it is incompatible with the recognition of the different forms of judgement set forth in Formal Logic, or even with the recognition of different forms which, as I have suggested,² may be present in all judgement as such. It can, I think, be argued that every judgement makes use of universal concepts;³ and that to conceive a universal is to think a mark which belongs, at least potentially, to a plurality of individuals,⁴ even if we apply it in a singular judgement.⁵ The assumption that in the last resort these individuals must be sensible may seem more difficult to defend;⁶ but I think

¹ As Kant himself says, these *objects* (that is, bodies) are mediately represented through the concept of divisibility (A 69 = B 93-4). The word 'mediately' presumably refers both to the fact that we use the concept of body and also to the fact that the concept of body refers to sensuous intuitions.

² See Chapter X § 5.

³ Certain types of judgement (e.g. 'Tully is Cicero') offer difficulties in the way of this contention. These difficulties might, I think, be evaded; but in any case it would be absurd to suggest that this doctrine applies only to categorical judgements, and still more absurd to suggest that it applies only to one type of categorical judgements.

⁴ There are difficulties here in regard to such concepts as 'omnipotence'.

⁵ Compare B 133-4 n.

⁶ When we say 'Honesty is admirable', the sensuous element is reduced to a minimum. Perhaps Kant would still maintain that we were, in the last resort, referring to individual acts of which we have some sensuous cognition. His main interest, however, is in our knowledge of the physical world.

this too could be defended, although I should have thought that it was irrelevant to Formal Logic.

In spite of difficulties it is not unpalatable to maintain that all judgement makes use of universal or general concepts for the purpose of knowing, directly or indirectly, a world of sensible individual objects;¹ and even that (whatever else it may do) it gives *unity* to a plurality of different individual objects,² so far as these individual objects are thought by means of a common mark (or marks). The unity so given may be called an 'analytic unity', a unity dependent on an act of analysis.³ This has nothing to do with analytic judgements, or indeed with any *special* kind of judgement.⁴ Whether Kant is right or wrong, a failure to see that he at least *professes* to describe all judgements without exception is bound to lead—and has indeed too often led—to a complete distortion of his argument.

§ 6. *The Categories*

The whole argument so far is only a preparation for the Metaphysical Deduction: it states, and perhaps in some ways corrects, the doctrines of Formal Logic on which that Deduction is based. In particular it leads up to the list of forms of judgement which is supposed to give us the clue to the categories. Kant would have helped us greatly if he had also given us at this stage a clear statement of what he means by categories, and why he describes them in so many different ways, the connexion between which is at first by no means easy to see.

¹ Compare A 19 = B 33: 'All thought must, whether directly or indirectly, by way of certain marks, relate ultimately to intuitions.'

² I think this is what Kant means when he says (in A 79 = B 104) that 'the same function' 'gives unity to the different ideas in a judgement'.

³ See A 79 = B 105 and B 133-4 n. Compare also Chapters IX § 6, X § 7 (at end) and XIV § 6. The act of analysis is the act present in all conception as such.

⁴ In the different forms of judgement objects may be united in different ways, but they are all supposed to be united in virtue of an analysis of common characteristics.

I will attempt to make good this omission even at the risk of being imperfectly understood until the argument has been developed further.

From its beginnings in Aristotle the science of metaphysics had been concerned with the real as such. Its aim was to deduce the detailed nature of the universe from some central principle,¹ and in so doing it concerned itself with pure forms apart from their connexion with matter.² By the time of Kant one of the main parts of metaphysics—if we may take the writings of Baumgarten as a guide—was called Ontology, and was concerned with the more general or abstract predicates of the thing.³ Some of these predicates are universal predicates, predicates which belong to all things.⁴

These universal predicates are not called categories by Baumgarten. The word 'category' was revived or reintroduced by Kant on the analogy of the Aristotelian categories.⁵ The Aristotelian categories are a list of the widest predicates which are predicable essentially of the various namable entities.⁶ There are differences between the sense in which Aristotle uses the word and the sense in which it is used by Kant, but these differences do not concern us here.

✶ If we use the term 'category' for the universal predicates of Baumgarten, we may say that the categories are the ultimate predicates which universally and necessarily apply to every thing so far as it is a thing. As universal and necessary, the categories are pure or *a priori*, and we might call them '*pure concepts of a thing in general*'.

Kant believes that it is impossible to have *a priori* knowledge of the universal and necessary character of *things*, if we suppose these things to be things-in-themselves. We can have *a priori* knowledge by means of the categories, only if the categories are due to the nature of the mind and are imposed by the

✓¹ Ross, *Aristotle*, p. 155.

² Ibid. p. 62.

³ Baumgarten, *Metaphysica* § 4 (XVII 24). The Latin is '*scientia praedicatorum entis generaliorum*'. I interpret this in the light of G. F. Meier's German translation.

⁴ Ibid. § 6 (XVII 24). These are opposed to disjunctive and relative predicates.

⁵ A 79-80 = B 105.

⁶ Ross, *Aristotle*, p. 23.

mind on the objects which it knows. Kant's metaphysic therefore, while retaining many of the ideals of the older metaphysics, ceases to be a speculative metaphysic concerned with reality as such. It becomes instead a Metaphysic of Experience, and is concerned with the universal and necessary characteristics of *objects* of experience, so far as they are objects of experience. Hence for him the categories are pure concepts, not of a thing in general, but of 'an object in general'.¹

When we consider what an object in general essentially is, we shall find that it consists of a sensible matter held together in a necessary synthetic unity.² It is this necessary synthetic unity which constitutes the universal and necessary character of any and every object; the matter may vary indefinitely. Hence the more exact description of a category is that it is *a pure concept of the necessary synthetic unity which is present in every object of experience*.³)

So far the doctrine offers little difficulty. Kant, however, believes that this necessary synthetic unity is imposed on the given sensible matter by an act of synthesis which is always the same whatever be the special character of the matter synthesised;⁴ and he believes that a concept of an object is also—it might be better to say 'includes' or 'involves'—a concept of the synthesis whereby such an object can be constructed.⁵ Hence he regards the category, not only as a concept of an object in general, but also as *a concept of synthesis in general*,⁶ a concept of that synthesis which is necessary to

¹ Compare A 93 = B 126. We must, however, still regard an object as essentially a concrete thing.

² A 104 ff.; B 137.

³ Compare A 321 = B 377 and A 326 = B 383. Also A 79 = B 105.

⁴ B 130. Houses, ships, and motor-cars, for example, must all be synthesised as substances with accidents, however much they may vary as regards the matter given to sense.

⁵ For example, the concept of a circle is, or includes, a concept of the synthesis by which a circle can be constructed: a circle is essentially a figure which can be constructed in a certain way. The construction in question is an imaginative construction, but must be based on given intuitions if we are to have a real object before us.

⁶ We might call it, more elaborately, a concept of the synthesis of the manifold of intuition *in general*; compare A 79 = B 104-5 and Chapter XIV § 3.

construct any and every object and to impose such synthetic unity as constitutes the essential character of any object *quod* object.

✓ Kant's account of this synthesis is complicated and difficult. The synthesis is a synthesis of intuitions and is the work of imagination, but according to Kant it must conform to the principles of intellectual synthesis present in judgement. These principles are implicit in the forms of judgement, and they are supposed to control¹ the imaginative synthesis. If an object is to be an object, it must be judged, and the imaginative synthesis must combine the given manifold in such a way that it can be judged under the various forms of judgement. The categories are therefore said to be the forms of judgement, —I think it would be better to say concepts of the forms of judgement²—*so far as the manifold of a given intuition is determined*³ *in conformity with them*.⁴ This is stated with many variations into which we need not at present enter.⁵ Curiously enough, the one place where it is not stated, but merely suggested,⁶ is just where it ought to have been stated, namely in the Metaphysical Deduction.

The imaginative synthesis which is controlled by the forms of judgment is essentially a synthesis of the pure manifold of time and space: because it imposes synthetic unity on the manifold of time and space, it also imposes synthetic unity on the manifold given under the forms of time and space. Consequently the category is described as *a concept of pure synthesis*.⁷

These different descriptions of the categories—as concepts of an object in general, concepts of necessary synthetic unity,

¹ Compare B 162 n. But see Chapter XXXIV § 3.

² 'The form of judgements (converted into a concept of the synthesis of intuitions) yielded the categories;' A 321 = B378.

³ To 'determine' the manifold is here, I think, to give it unity or form. ⁴ B 143.

⁵ See, for example, B 128; A 244-5; *M.A.d.N. Vor.* (IV 474); and *K.d.p.V.* (V 65). ⁶ A 79 = B 105.

⁷ In A 78-9 = B 104-5 the concept is regarded as a concept of the pure synthesis and also as a concept of the *unity* of the pure synthesis, but I do not think that this is a substantial distinction: the category might also be said to be a concept of the *rule* of the pure synthesis.

concepts of the forms of judgment, and concepts of pure synthesis—may suggest that Kant is using the word in different and confused senses. We must, however, entertain the possibility that his meaning may become more intelligible as we advance. At present we can note only the distinction involved in the last two descriptions.

§ 7. *The Schematised Categories*

The categories as concepts of the forms of judgement¹ are *pure* categories. As such they are said to be 'empty', in the sense that their content is the empty forms of thought, or forms of judgement, through which no determinate object is known.² They do indeed relate to an object in general; and since they are forms of discursive or conceptual thought, they, so to speak, await an object to be given in some sort of sensuous intuition—which Kant calls *intuition in general*. For us, however, they must be related to *human intuition*, which is given under the form of time. It is only when translated into terms of time,³ that the categories can be said to have meaning; that is, to have as their content the necessary and universal characteristics of *objects of human experience*, and not merely the empty forms of judgement. As so translated into terms of time they are no longer *pure* categories, but *schematised* categories. It is as schematised that the categories are concepts of the pure synthesis.⁴

Thus the pure category of ground and consequent, which is thought in the hypothetical form of judgement; has no

¹ Here, as always, we must understand 'the forms of judgement as applied to and determining intuitions'. It seems undesirable to repeat this qualification every time the phrase is used.

² Compare B 150 and A 245.

³ Compare Caird, *The Philosophy of Kant*, p. 407, and *The Critical Philosophy of Kant*, Vol. I, p. 441.

⁴ Yet even the pure categories, being concepts of the synthesis of the manifold of *intuition in general*, must also be in a sense concepts of the synthesis of the manifold of pure intuition. The first synthesis is the genus, and the second a species of the genus. Compare Chapter XIII § 6.

reference to time; and even if we think of it as applying somehow to objects given in intuition, this thought is so vague as to be called empty. If it is translated into terms of time, it becomes the schematised category of cause and effect, that is, of a consequent which necessarily succeeds its ground in time. The thought that all changes in objects of experience must be causally determined is very far from empty; and if it could be proved, as Kant believes it can, it would be an important addition to metaphysical truth.

For a clear understanding of this side of Kant's thought, we must await the further development of a long and complicated argument. The details will not be given to us until we reach the chapter on Schematism, and this is one of the main reasons for the difficulty of Kant's Deduction as a whole. It is, however, all-important to recognise from the first that the reference to time is not a late interpolation, but is essential to Kant's argument.

Apart from time, there could be no Transcendental Logic at all. There could only be a Formal Logic concerned with the forms of judgement. It is *because* there are pure as well as empirical intuitions that there can be a difference between pure and empirical thought of *objects*.¹ For the same reason we are able to have a Transcendental Logic which does not abstract wholly from the content of cognition, but confines itself to *a priori* knowledge and excludes empirical knowledge.² It is because Transcendental Logic has a manifold of pure sensibility before it, as set forth in the Transcendental Aesthetic, that it has any content: apart from this the pure concepts with which it deals would be without any content, and would be completely empty.³ Kant is as clear and explicit on this point as a man could be. If we fail to recognise this truth as absolutely essential to his whole argument, the *Kritik of Pure Reason* is to us no better than a sealed book.

¹ Compare A 55 = B 79-80.

² Except in so far as it considers the *a priori* knowledge which is present in all empirical knowledge.

³ A 76-7 = B 102. It would perhaps be more correct to say that their content would be the empty forms of judgement.

CHAPTER XIII

CONCEPTION AND SYNTHESIS

§ 1. *Pure Intuition and the Categories*

Kant begins his Metaphysical Deduction proper by calling attention to the fact that the categories must be schematised. The pure categories, if they are not to be empty, must have a 'stuff' or matter given to them; and this matter must also be pure, if the categories, when filled, are to be pure concepts. Such a pure matter is given in space¹ and time, for these contain a manifold of pure *a priori* intuition. But space and time are also forms of intuition; they are conditions under which all intuitions of objects are given to human minds. Hence space and time are bound to affect the character of the categories, which are pure concepts of objects in general. In other words, (the categories must be schematised; that is to say, they must cease to be mere empty forms of judgement, and must receive a definite content from their relation to space and time. The reason why they can do so is this: the spontaneity of thought, which is manifested in the forms of judgement, demands that the pure manifold of space and time should be 'gone through, taken up, and combined'² *in a certain way.* The act of doing this is called synthesis, and it is Kant's contention that this synthesis of the pure manifold has different aspects corresponding to, and imposed by, the different forms of judgement.)

¹ A 77 = B 102. Note that space, which becomes more prominent in the second edition, is already mentioned here as on an equality with time. Note also that just as sensibility presents a pure manifold of space and time to thought, so the Transcendental Aesthetic may be said to present a pure manifold of space and time to Transcendental Logic. The Critical Philosophy makes explicit in reflexion what takes place unreflectively in experience.

² These phrases, and notably 'taken up', are connected with what Kant calls 'apprehension'; see A 120 and A 99, and compare B 160 and B 162.

§ 2. *The Nature of Synthesis*

Kant believes that synthesis is an essential element in all knowledge, and he devotes two paragraphs to an explanation of what he means by synthesis 'in its most general sense'.¹ When this general explanation has been given, he will return to the special case of pure synthesis, which, as he has asserted, supplies a content for the pure categories.

The description of synthesis in general—and even the account of pure synthesis—is a summary statement of doctrines which will be elaborated in the Transcendental Deduction.² The lack of detail is natural, and even necessary, if repetition is to be avoided; but the description is too compact to be easily intelligible, and some of the assertions may give a false impression, unless they are interpreted in the light of what comes later. I have found it difficult to explain Kant's meaning without becoming involved in a discussion of the Transcendental Deduction, which would here be out of place; and the reader must be warned that the present account is in some ways provisional and does not attempt to meet objections which might very reasonably be raised.

In the second of the two paragraphs under consideration we are told that 'synthesis in general' is the mere work (or effect³) of imagination, and it is contrasted with the work (or function) of the understanding in 'bringing the synthesis to concepts'. From this, taken by itself, we might conclude that the synthesis of imagination is wholly independent of the understanding. Such a view is not borne out by the 'Transcendental Deduction, and even in the present passage there are perhaps indications of a closer connexion between the two active powers of the mind.⁴ Furthermore a *mere* synthesis of the imagination

¹ A 77 = B 103; compare A 78 = B 103.

² Compare A 78 = B 103, 'as we shall see later'.

³ '*Wirkung*' may mean either 'working' or 'effect'.

⁴ The synthesis of the pure manifold—which ought surely to fall under the general case—is demanded by 'the spontaneity of our *thought*' (A 77 = B 102); and in the definition of synthesis use is made of the word '*begreifen*' (to 'grasp' or 'comprehend'), which may

would seem to cover casual association and the creative activity of the artist, but Kant's sole concern here is with synthesis as a factor in knowledge of objects. This latter synthesis we shall subsequently know as the 'synthesis of apprehension',¹ and we shall find that it is closely bound up with conception.

Synthesis, in its most general sense, is 'the act of adding different ideas to one another, and of grasping (or comprehending²) their multiplicity in one cognition'. An example of the kind of act which Kant has in view would be the act of combining a series of given appearances into the complex intuition³ of one individual house. If we press Kant's subsequent statement that synthesis is the *mere* working of imagination, we must hold that the concept of 'house' is not even unconsciously at work in the synthesis, and *a fortiori* that the judgement 'This is a house' is an entirely different act. Personally, I believe his view to be that the concept of 'house' is at work, even if unconsciously, in this synthesis of imagination. What Kant has in mind is such a synthesis of imagination as must be present when we judge that this is a house; and his description of synthesis 'in its most general sense' might perhaps be taken to cover the whole complex of understanding and imagination necessarily present in the judgement 'This is a house'.

The latter view of synthesis is at any rate the view of the Transcendental Deduction.⁴ On this interpretation we might be tempted to identify the act of synthesis with the act of judgement which was described above⁵ as 'the act of ordering

suggest the presence of a '*Begriff*' (concept), as e.g. in A 68 = B 93. Compare also A 103. '*Zusammenfassen*' is the word appropriate to a merely imaginative comprehension; see *K.d.U.* § 26 (V 251).

¹ See A 99-100, A 120, and B 160. The synthesis of apprehension is the taking up and combining of the given manifold in one intuition.

² '*begreifen*.'

³ The use of the word 'intuition' (or even 'image') in such a context does not imply that we are concerned with something subjective. I refrain from saying 'complex object' only because the object, if it is to be strictly an object, must be judged and not merely imagined or sensed.

⁴ Compare A 103 and B 129-30.

⁵ See A 68 = B 93 and Chapter XII §§ 2 and 4.

different ideas under one common idea'. Such an identification would be a mistake. Both acts are indeed, on this interpretation, judgements; but in describing them Kant is describing two quite different aspects or implications of judgement. The earlier passage, taken in its context, suggested that in every judgement a plurality of individual objects is brought under a common mark (or marks); it was in fact concerned with judgement as involving conception, and so as involving an act of abstraction or *analysis* by which we think the common characteristics of different individual objects. The present passage is concerned with judgement as involving—at any rate when we know physical objects by its means—a *synthesis* of different intuitions (or given appearances) into an individual object which can be analysed.¹ This synthesis is divided into two processes—not I think to be regarded as succeeding one another—firstly an adding of different ideas (or appearances) together, and secondly a 'grasping' of them in one cognition by means of a concept.²

We may, however, prefer to suppose at the present stage, that in his definition of synthesis Kant is ignoring the act of understanding which is referred to later as 'bringing the synthesis to concepts'. In that case synthesis ('in its most general sense' is the act of adding different ideas to one another and grasping their multiplicity in one *intuition*.) In certain respects this interpretation is better suited to the immediate context. Even so, we must remember that the synthesis of imagination in question is that which is present in apprehending

¹ E.g. in order to judge that this is a house, we must not only recognise by means of analysis the marks of 'houseness' which are common to this house and other houses; we must also by an act of synthesis hold together this house (and perhaps other houses) as a single complex object before the mind.

² The one 'cognition', in this interpretation, is primarily an intuition; for the many appearances or intuitions are combined into one complex intuition (or object) such as a house. The unity of the complex intuition depends, however, upon our concept of the plan by which many different intuitions are combined into one complex intuition. I have no doubt that this is Kant's doctrine, but it is doubtful whether he wishes to make it explicit in the present provisional exposition.

a real object; and we must also remember that apart from judgement it does not give us *knowledge* of the object.

A synthesis is pure when the manifold synthetised is given *a priori*, as is the manifold of time and space; it is empirical when the manifold is given in sensuous intuition. As the manifold of sensuous intuition is always given in time and space, every empirical synthesis must involve a pure synthesis as well.¹

§ 3. *Synthesis and Analysis*

Kant now proceeds to contrast synthesis with analysis, and to maintain that synthesis is the condition of analysis.² Our synthesis of the manifold (whether empirical or pure) may at first give us a cognition³ that is crude and indistinct (or confused)⁴. Analysis may be needed to make such a cognition distinct, but it is synthesis which gives us something to analyse. Apart from synthesis we should have mere unrelated elements; we should not have anything that could be described as a determinate content to be analysed. Without some determinate content held together before the mind there could be no possibility of knowledge; and the primary origin of knowledge,

¹ Kant would have made his doctrine clearer, if he had stated this point explicitly at the present stage; compare A 99-100 and A 102.

² Compare B 130 and also B 133.

³ This 'cognition' is not 'knowledge' in the strict sense, if synthesis is the work of mere imagination.

⁴ A cognition is 'crude' (*roh*), when it may contain error: 'crude' is the opposite of 'exact' or 'accurate' (*genau*), which means adequate to the object and wholly free from error; see *Log. Einl.* VII (IX 54). A cognition is 'clear' (*klar*) as opposed to 'obscure' (*dunkel*), when we are consciously aware of it in distinction from other cognitions with which it may be bound up. A cognition is 'distinct' (*deutlich*) as opposed to 'indistinct' (*undeutlich*), when its parts and their combination in the whole are also 'clear'. Kant disapproves of the common usage whereby 'confused' (*verworren*) is made the opposite of 'distinct', but he often employs this terminology himself. An indistinct cognition is made distinct by analysis, and there is a sensuous distinctness (of intuitions) as well as an intellectual distinctness (of concepts). See *Log. Einl.* V and VIII (IX 33-4 and 61-2), and *Anthr.* §§ 5 and 6 (VII 135, 137-8); also B 414-15 n. Further details will be found in Chapter XIX § 8.

so far as knowledge depends on the activity of the mind, is to be found in synthesis, not in analysis.¹

Kant complicates his discussion at this stage by raising questions as to the relation between analysis and conception: he insists that the content (or matter) of concepts can never arise by analysis.

It is obvious that if the synthesis of imagination gives us a complex intuition or image, we can proceed to analyse the image, to make its parts and their relation to one another clear, and so to make the whole image distinct. This process may be carried out on the intuitive level,² and it does not produce either the form or the matter of concepts.

If we turn to the origin of concepts, we have already seen³ that, according to Formal Logic, the form (or universality) of concepts is always made by comparison, reflexion, and abstraction. This complicated procedure is commonly called 'abstraction', but in the present chapter Kant describes it as 'analytic'.⁴ The implication of his assertions is that while the form of concepts arises by a procedure which may be described generally as analytic, the matter of concepts cannot arise by such a procedure, but must arise by an act of synthesis.

As regards the form of concepts, I do not think Kant's insistence upon the analytic procedure of the mind in the making (and thinking) of concepts as such should be taken to add anything new to what we have already learned. He has maintained that to conceive is essentially to think a plurality

¹ It may be objected that synthesis and analysis proceed *pari passu*. In a sense Kant might be prepared to admit this, but his point here is that in an indistinct whole we may hold together different elements not yet distinguished from one another. This is obviously true. It seems to me also to be entirely opposed to the psychological atomism of Hume.

² It may be maintained that conception is always present even in awareness and analysis of images, but we can at least say that the conceptual element plays a subordinate part. An illustration given by Kant himself is looking at the Milky Way, first with the naked eye, and then through a telescope. See *Log. Einl.* V (IX 35).

³ Chapter IX § 6.

⁴ Compare A 76 = B 102 and A 78 = B 104.

of individual objects by means of a common mark or marks. He is now maintaining that the recognition of such marks as common involves analysis of the given objects thought under the marks. This it manifestly does; and it would be unfair to object that *mere* analysis can give us only distinctness in the image, and not a general concept. Kant is alluding to an accepted doctrine of Formal Logic; and if he is stressing a special aspect of that doctrine, or even if he is calling attention to an aspect not usually recognised, there is no reason to suppose that he identifies conceiving with the act of analysing given intuitions.¹

The further implication of Kant's doctrine is that the matter of concepts depends primarily on synthesis. His main concern would seem to be with complex concepts, such as the concept of 'house'.² If we are to abstract the features common to this house and other houses, we must hold together this house (and perhaps other houses) as a complex individual object before the mind.³ Kant appears to have in view the making,

¹ The form or universality of the concept does not depend merely upon our finding by analysis that it is contained in our intuition or intuitions as a part: it depends essentially on our act of using it as a common mark, and thereby relating it to a plurality of objects. Compare *Log.* § 7 *Anmerk.* and *Log.* § 5 *Anmerk.* 1 (IX 95 1d 94).

* [Kant's doctrine appears to be that by analysis we find 'this red' to be present in several intuited objects, and that by an act of abstraction we are able to use it as a common mark, and so as a universal idea. I have no wish to conceal the difficulty of this doctrine, but there is surely some sense in saying that in the concept of 'redness' the matter (red) is given, while the form or universality is made. The concept of 'redness' is an unduly simple illustration, for Kant has in view for the most part complex concepts, such as the concept of 'house', where the structure or combination of marks is as important as the given marks themselves.]

² Nevertheless even a simple concept like 'redness' is also covered by the doctrine; see B 133-4 n. Kant does not of course deny that this red and that red must be given to sense, but he insists that we must synthetise different red objects if we are by analysis to acquire the concept of redness as their common mark.

³ We must also hold together before the mind a set of individuals as an aggregate or whole, and this too is an act of synthesis; but Kant is concerned primarily with the holding together of the complex individual object to which the concept refers.

or perhaps better the discovery,¹ of the concept as regards its matter or content; but his doctrine, I believe, holds whenever we think by means of concepts. In thinking of individual houses under the concept of 'house', we require not only an analysis of given houses, but also a synthesis whereby we combine given intuitions into a complex intuition of this or that house. The necessity for analysis was generally recognised,¹ if not under that name, at any rate under the name of 'abstraction': the necessity for synthesis is the special doctrine of Kant himself. He believes that both analysis and synthesis must be present in all our judgements about objects.

§ 4. *Two Factors in Knowledge*

Kant recognises that his account of synthesis demands a fuller justification, to be given later.² At present he asserts that synthesis in general is the work of the imagination and is a necessary condition of knowledge. The other factor in knowledge is understanding, which 'brings the synthesis to concepts'.

Imagination is said in this connexion to be 'a blind but indispensable function³ of the soul, of which we are scarcely ever conscious'. This does not imply that we are never conscious of the synthesis of imagination: it implies on the contrary that we may sometimes be conscious of this synthesis. Nor does the use of the word 'blind' imply that imagination itself is necessarily unconscious. Intuitions, which nobody could regard

¹ It is only 'factitious' concepts which are 'made' as regards their matter; other concepts (whether *a priori* or empirical) are 'given' as regards their matter. See *Log.* § 4 (IX 93). and Chapter IX §§ 4 and 5. In all cases synthesis—arbitrary in the case of factitious concepts, determined by the nature of the mind in the case of *a priori* concepts, determined by the nature of sensations in the case of empirical concepts—is the necessary condition of there being a content to analyse, and so is the necessary condition of the act of analysis or abstraction by which concepts are made as regards their form.

☞ ² A 79 = B 103: 'Synthesis in general, as we shall see later, is. . . .'

³ Strictly speaking, imagination is a 'power': its work is a 'function'. Note incidentally that in *Nachträge* XLI Kant substitutes 'understanding' for 'soul', clearly regarding imagination as a lower form of understanding.

as necessarily unconscious, are also said to be blind—apart from concepts.¹ Imagination is in general a conscious activity, but not a self-conscious one; in imagination we have some kind of awareness, but we have scarcely ever awareness of the nature of our own act.²

It is a great mistake to interpret such expressions as if Kant were expounding some dark metaphysical mystery. He is attempting to give a clear analysis of our ordinary experience in such an act as the recognition that this is a red house or that this house is red.³ What we see initially is a coloured surface, and if we are to know that we have before us a house with certain characteristics, we must supplement what we see at any moment by an imaginative construction. This imaginative construction may depend upon previous intuitions of this house or of other houses; it may depend on our walking round or through the house and observing its different parts.⁴ We are

¹ A 51 = B 75. I suggested in Chapter IV § 2 that intuitions without concepts are blind, because without thought, although we might, for example, see a colour, we could not know that it was the colour of a chair, or indeed of anything: intuition apart from concepts can give us only a momentary appearance, not knowledge of an object. Imagination is also blind apart from concepts, since it can give us only a picture or an image, and not knowledge of an object. The parallel between intuition and imagination is in this respect exact. It is only because intuition and conception are combined that we can have knowledge; and it is only because we bring the synthesis of imagination to concepts that we can have knowledge. Imagination may, however, be blind in the further sense that it works according to rules of which it is unconscious, and these rules can be known only by reflective judgement. Compare A 88 = B 121 and A 10 n.

² We have immediate awareness of the picture or image made, but not reflective awareness of our act of making it.

³ We might equally take such a judgement as 'This is a house'. I choose the above example because it is simple, and yet brings out the element of sense necessary for the judgement. The passage in *Prol.* § 19 (IV 299 n.) suggests that a judgement concerned with primary qualities (such as 'This house is square') would be more satisfactory, but it is difficult to believe that the distinction there made by Kant between 'judgements of perception' and 'judgements of experience' is altogether happy.

⁴ This second case is the one which Kant seems to have primarily in view. It obviously involves memory, and therefore presumably

scarcely ever conscious of the imaginative act; and except when we go on to observe other parts of the house, we may be only vaguely conscious of the images or intuitions added to it by what we see; but such an imaginative act is always present, and must always be present, in recognising any complex object such as a house. The blind synthesis of imagination is the first condition of knowledge.

It is not, however, the only condition. Imagination by itself could give us only a picture or image, and perhaps not even that. If we are to know this house and its colour, we must 'bring the synthesis to concepts'.¹

§ 5. *Synthesis and the Concept*

The primary meaning of this last statement might seem to be that we must perform on the conceptual level what is performed on the imaginative level. We must not only combine our individual intuitions of house and red;² we must also combine our corresponding concepts in the judgement that this house is red. This is the work of understanding, and it is the condition of knowing a real object.

So far Kant's doctrine is comparatively simple, but in the light of what follows we must add certain complications which will be considered more fully later and have at present to be taken more or less on trust. The judgement is not merely a recognition that we have combined certain intuitions in an imaginative synthesis: it asserts that certain features are combined in the real world.³ Furthermore, although the synthesis of imagination is controlled by what is given in sensation,

reproduction in imagination. Even in this case imagination probably adds a good deal to the sum of what we have observed, but Kant's argument would hold, if we merely combined our successive intuitions into one complex intuition of this house.

¹ Incidentally this could happen only by a miracle, if the imaginative synthesis were wholly unconscious.

² Our intuition of this house is a complex intuition of which the intuition of red is a part.

³ This cannot be the work of mere imagination or sense-perception. Compare B 142.

(as for example when we look at the house from every side), the principle at work in the synthesis is the empirical concept of 'house'. The successively given intuitions—even if we ignore those that imagination adds by way of supplement—are all combined in accordance with a single plan; and this plan is what is thought generally in the concept of 'house'. In judging that this is a house, or that this house is red, we are conceiving the general plan or rule which is manifested in the synthesis of imagination, and only so can the intuitions synthetised form for us one object of knowledge.¹

A complex concept is for Kant more than a collection of common marks found to be present in different objects: it involves some knowledge of the way in which these marks are combined. To take a still simpler example, the concept of a triangle is not a concept of three straight lines, but of three straight lines combined in such a way as to form the sides of a plane figure. If we are to know that this is a triangle, we must recognise that in following the boundaries of the figure given to perception we have combined three straight lines in accordance with the concept. The concept of triangle may be said to involve—it might even by Kant be said to be—the concept of a synthesis of three straight lines. Hence in recognising that this is a triangle we may be said to bring the synthesis to concepts, that is, to bring into consciousness, and so make clear, the concept of the synthesis itself. Similarly in the more complicated case of recognising that this is a house we are making clear the concept of the synthesis whereby we combined the given manifold into one complex intuition.

For Kant the concept of any object is (or involves) the concept of the imaginative synthesis by which we combine the given manifold into one complex intuition. More precisely

¹ It may be suggested that the imaginative synthesis is dominated by the concept 'red house' rather than 'house'. This is no doubt true where we judge that this house is red (or that this is a red house), but the concept of 'house' is of fundamental importance; and we must concentrate on the simplest and most fundamental factors in the situation, if we are to understand Kant's doctrine.

(since the concept is not the idea of an individual¹) the concept of the characteristics *common* to different individual objects is (or involves) a concept of the *rule* of the imaginative synthesis which is necessary to combine the given manifold into one complex intuition of an object possessing these common characteristics.² Hence when we know the synthetised manifold by means of a concept, we are in some degree making explicit the rule which is manifested in the synthesis of imagination: in Kant's language we are 'bringing the synthesis to concepts'.

All this may sound very complicated, but it is comparatively simple once we see what Kant is talking about. His statement should be taken on an empirical level, and is not intended to raise any questions as to idealism and realism. As I understand him, he is assuming that we possess empirical concepts and have knowledge of empirical objects. He is not asking either how we come to have empirical concepts or how we can begin with nothing but empirical intuitions and pass to knowledge of an object. All he asks is what we are doing when we are knowing empirical objects.³ His answer is that we are combining

¹ As I pointed out in Chapter IX § 4, although we use singular terms in speaking of concepts (e.g. the concept of 'house'), this should not blind us to the fact that the content of a concept is not an individual object.

² Compare A 141 = B 180. 'The concept of "dog" signifies a rule according to which my imagination can delineate generally the shape of a certain four-footed animal without being limited either to some special individual shape offered by experience or to any possible individual image which I construct *in concreto*.' This doctrine is elaborated further in the Transcendental Deduction and in the Schematism of the Categories.

³ I believe—in spite of his use of temporal phrases like 'at first'—that he is analysing our knowledge into contemporaneous and not successive processes. The general doctrine, however, remains the same, if we take him to be describing a process whereby we first of all synthetise the given manifold into a complex intuition of we know not what, and finally decide that what we have before us is a house. This is a much rarer process, but even in such a case the vague concept of 'thing' or 'object' is present all along. This incidentally involves the presence of the categories, but for the moment we need not consider their presence. The fundamental error of interpretation is to suppose that Kant is describing a process whereby we first of all have before us a mere intuition recognised to be purely subjective.

or synthesising the given manifold into one complex intuition in accordance with an empirical concept, and we are making this empirical concept explicit in such a judgement as 'This is a house'. We cannot have, in the strict sense, knowledge of an object, unless there is present both a synthesis of the imagination and a judgement of the understanding.

It should be unnecessary to add that he is offering us a reflective analysis of an unreflective act. He does not mean that in knowing an object we are reflectively aware of our act of synthesis, and still less that we recognise our empirical concept to be a concept of the rule manifested in the act of synthesis. Nevertheless if we examine what is involved in our knowledge of any concrete object such as a house, we shall find that his analysis is correct.¹

§ 6. *Pure Synthesis and the Category*

Having described synthesis in general, Kant returns to the pure synthesis. This pure synthesis he has already connected with the categories by asserting (1) that the categories receive their 'stuff' or content from the pure manifold of time and space, and (2) that the spontaneity of thought demands a synthesis of this pure manifold.² He now informs us that '*the pure synthesis, when it is universally represented, gives us the pure concept of the understanding.*'³ This can mean only that the category is a concept of 'the pure synthesis'.

We have seen that for Kant the concept of 'house' is a concept of the *empirical* synthesis of imagination⁴ whereby the given and then by a further act of judgement recognise that it is the subjective intuition of an objective house. There is no such temporal transition from the subjective to the objective, and Kant is not describing such a transition.

¹ Compare A 103-4.

² See A 76-7 = B 102.

³ A 78 = B 104. 'Universally represented' is in German '*allgemein vorgestellt*'.

⁴ Here, as always, we must understand this to mean, not that it is an idea of the actual synthesis which takes place, but that it is a concept of the common character which this synthesis shares with others, and so a concept of the rule or plan manifested in this synthesis and in other syntheses.

manifold is combined into one complex intuition of a house. Hence it is not surprising to find that the category is—I should prefer to say ‘involves’ or ‘includes’—a concept of the *pure* synthesis. The difficulty is to know what Kant means by the ‘pure synthesis’.

I will put my view dogmatically: its justification must be found in the subsequent analysis of Kant’s argument. The pure synthesis in question is the synthesis which combines the pure manifold of time and space;¹ and this pure synthesis imposes upon all sensible objects certain necessary and universal categorial characteristics. To take an obvious example: in knowing a house I am not only synthetising empirical intuitions; I am also synthetising the pure manifold of the space which it occupies and the time through which it lasts. This pure synthesis necessarily imposes upon the object the categorial characteristic of being an extensive quantity, since time and space are extensive quantities;² and it is present whenever we know any sensible object.³

Kant would seem to be concerned here with the category as containing a ‘stuff’ given through the synthesis of the pure manifold, and therefore with the category as schematised. Nevertheless even the pure category might be said, on Kant’s view, to be in a sense a concept of the pure synthesis. The schematised category of extensive quantity, for example, is a concept of the synthesis of the homogeneous manifold of space and time:⁴ the pure category is a concept of the synthesis of the

¹ We shall have later to face certain difficulties as to the relation between this pure synthesis and the empirical synthesis of the given manifold, but it would be unprofitable to raise these difficulties here.

² Kant believes that the same synthesis also imposes intensive quantity, and that it makes the object appear to us as a permanent substance with changing qualities which interacts with other similar substances.

³ Kant is thinking primarily of physical objects in space, though his doctrine ought to apply to objects of inner sense given under the form of time. I have chosen the example of extensive quantity because it offers little difficulty. The difficulties involved as regards other categories must for the present be postponed.

⁴ Or of homogeneous spaces and times.

homogeneous, which is thought in the form of the judgement 'All S is P'—for all the S's are thought of as homogeneous. Hence the pure category may be said to be a concept of the synthesis of the homogeneous manifold of space and time in the same sense as the concept of the genus is a concept of any species falling under the genus.¹

The spontaneity of thought demands that the pure manifold should be synthetised *in a certain way*; the principles or rules at work in the synthesis of the pure manifold must accord with the necessary forms of thought, and so with the pure categories. This may be the reason why Kant, who has said that a synthesis is pure when the manifold synthetised is given *a priori* (as is the pure manifold of time and space),² now describes pure synthesis as one which 'rests on a ground of synthetic *a priori* unity'.³

I do not think there is any conflict between these two statements. When we synthetise an empirical manifold, as for example in the act of knowing an individual house, the synthesis appears to be controlled—and for the moment we may accept this view—by the nature of intuitions which are given empirically. When we synthetise the pure homogeneous manifold of time and space, the synthesis is controlled by the nature of our concept. This can be seen in the procedure of mathematics.⁴ We construct a triangle or a circle in pure intuition according to the nature of our concept, not according to the nature of

¹ Compare A 142-3 = B 182, B 162, B 202 ff., and A 242 = B 300. Similarly if we abstract from the temporal element involved in the synthesis of cause and effect, we are left with the pure category of ground and consequent, which is thought in the hypothetical form of judgement; see B 162-3. Even if we cannot accept this theory, we must try to understand it. For further details, see Chapter XXXIII.

² See A 77 = B 103.

³ A 78 = B 104.

⁴ It is confusing when Kant, immediately after defining the pure concepts of the understanding as concepts of the pure synthesis, proceeds to discuss the pure synthesis in relation to mathematical concepts. I find it difficult to believe that 'pure concepts of the understanding' can here cover mathematical concepts; they ought to be the categories and the categories alone. A mathematical concept is a pure concept inasmuch as it is a concept of a pure synthesis, but it is not a pure concept of the *understanding*.

what happens to be given to us in empirical intuition.¹ This is an arbitrary act upon our part, and for this reason mathematical concepts are said to be arbitrary.² The categories are not arbitrary, for they are implicit in the nature of thought as such; but it is necessary for the human mind to combine the pure manifold in accordance with the categories, just as the mathematician combines—though only by an arbitrary act³—the pure manifold in accordance with mathematical concepts.

It is clear that the mathematical concept of triangle is the source or ground of the unity⁴ of the pure synthesis whereby we construct a triangle in pure intuition; and Kant believes that similarly the categories are the sources or grounds of the unity of the pure synthesis which is necessarily present in knowing any empirical object.⁵

¹ Kant's own example is the more complicated one of counting. He points out that counting is a synthesis in accordance with concepts, and this is most obvious in larger numbers where we employ the concept of the decad. Prichard's objection (*Kant's Theory of Knowledge*, p. 164 n.) that we do not use this concept in counting numbers less than ten seems to me irrelevant. For further details of Kant's view on this point, see *K.d.U.* §§ 26 and 27 (V 251–60).

² Compare Chapter IX § 5.

³ Nevertheless this arbitrary act must itself conform to the nature of space and time and to the categories.

⁴ It is a ground of 'synthetic *a priori* unity', because the unity is the unity of a synthesis and is independent of experience. This unity is said to be *necessary*, and it should be noted that in this passage, which is alleged to be late, Kant makes a particular concept, and not a category, the ground of necessity—the very doctrine whose presence is one of the main reasons for maintaining that a subsequent passage (A 105–6) must be early.

⁵ Compare A 79 = B 104. The ultimate source of the unity of the pure synthesis is the unity of apperception, the 'I think' which must accompany all our ideas; but since thought, according to Kant, is necessarily manifested in a definite number of principles of synthesis (the forms of judgement), each pure category may be said to be the ground of a special unity in the pure synthesis. The difficulties of this doctrine should not detain us at the present stage.

§ 7. *The Conditions of a priori Knowledge*

This last point is brought out by Kant in the paragraph¹ which precedes his difficult and summary statement of the Metaphysical Deduction; but it is prefaced by a further contrast between Formal and Transcendental Logic.

Formal Logic, in treating of the form (or universality) of concepts, describes the analytic procedure which is present in making—and, I believe, in thinking—any and every concept as such; that is, it describes the procedure of bringing different intuitions (or objects) *under* a concept² by analysis and by the abstraction of common characteristics. With this analytic procedure Transcendental Logic has no concern: its business is to show how the pure synthesis (involved in knowing any and every object) is 'brought *to* concepts'. Transcendental Logic, in short, will show us that the categories are the principles at work in the pure synthesis which is a necessary element in all knowledge of objects;³ and consequently that by means of the categories we have *a priori* knowledge of any and every object as such.

For *a priori* knowledge of all objects⁴ three things are necessary: firstly a manifold of pure intuition; secondly a synthesis of this pure manifold by imagination; and thirdly the pure concepts of the understanding. In this doctrine Kant never varies, and we shall find it elaborated in the Transcendental Deduction.

¹ A 78-9 = B 104.

² Compare also the definition of 'function' (upon which all concepts are said to be grounded) in A 68 = B 93.

³ The categories are employed in all 'experience' from the very start, and they had been made explicit or 'clear' by reflective thinking long before the time of Kant. The business of Transcendental Logic is to justify them by showing that they are the principles governing the pure synthesis involved in all knowledge.

⁴ Note that Kant is concerned with *a priori* knowledge of *all* objects—mathematical concepts give us *a priori* knowledge only of certain special kinds of objects (triangles, circles, and so on); and indeed mathematical objects are not objects in the full sense (for objects proper must be capable of being given to sense), but are rather the form of objects (see B 147).

In view of the previous discussion it is hardly necessary to add (1) that the synthesis of the pure manifold does not—any more than the synthesis of an empirical manifold¹—give us by itself knowledge in the strict sense; (2) that the pure concept of the understanding gives unity to the pure synthesis;² (3) that it consists solely in the thought of this necessary unity. The last statement may indeed appear to be novel; but for Kant there would seem to be no difference between saying that the category is a concept of the pure synthesis³ (or of the rule of the pure synthesis) and saying that the category is a concept of the unity of the pure synthesis.

The further point to be made is that the categories 'rest' or are grounded upon the understanding, as is already indicated by calling them 'pure concepts of the *understanding*'. No doubt all concepts may be said to rest upon the understanding inasmuch as they rest upon the 'function' of judging.⁴ The categories, however, do so in a very special and more immediate sense; for, as Kant believes, the rules of pure synthesis which constitute their content are imposed neither by the nature of given sensations nor by an arbitrary act of the mind, but by the essential nature of judgement itself.

This contention is the crux of the Metaphysical Deduction, and the whole of the previous argument has been leading up to it. It is expounded by Kant in one concentrated and difficult paragraph,⁵ which will be examined in the following chapter.

¹ Compare A 78 = B 103 and § 4 above.

² Just as the mathematical concept gives unity to the imaginative synthesis in a mathematical construction. We need not yet raise the question whether the empirical concept gives unity to the empirical synthesis of apprehension or is present only when we recognise this unity.

³ This we have already learned (see § 6 above).

⁴ See A 68 = B 93. All conception involves at least a problematic judgement whereby we bring different individual objects under a common mark.

⁵ A 79 = B 104-5.

CHAPTER XIV

THE METAPHYSICAL DEDUCTION

§ 1. *The General Nature of the Argument*

The sentences in which Kant sums up the Metaphysical Deduction are too concentrated to be clear, and the exact interpretation of the language employed may reasonably be subject to dispute. It would be tedious to consider all the possible interpretations of each separate phrase, and I propose to state only what seems to me the most probable meaning.¹ Nevertheless I believe one thing to be beyond all reasonable doubt—that Kant is contrasting the two views of judgement which have been examined in the two preceding chapters, the views proper to Formal and to Transcendental Logic.² On the one hand we have learned that all judgement, and indeed all conceiving, involves an analytic procedure whereby different individual objects are thought by means of a common mark and are united under that common mark. On the other hand, we have learned that all judgement, and indeed all conceiving, so far as it gives us *knowledge* of real individual objects, involves imaginative synthesis of a given manifold, both empirical and pure, and so involves the unification of the manifold into an intuition of an individual object. These two doctrines—both of which Kant believes to be true—are brought together in the final argument and are supposed to yield the conclusion of the Metaphysical Deduction.

The final argument ought to show that the categories issue from the nature of the understanding itself and constitute a complete³ system corresponding to the system of the necessary

¹ As this is a matter of very great importance, I wish to say—in addition to my general acknowledgment in the Preface—that in the present discussion I have profited very much by suggestions both from Mr. Barker and Mr. Cousin, though they are in no way responsible for my view.

² The first view is given in A 67 = B 92 ff., and the second in A 76 = B 102 ff.

³ A 67 = B 92.

forms of judgement.¹ In view of what Kant has said,² we might expect the final argument to show also how the categories can receive a 'stuff' from the pure manifold of space and time, and can consequently apply *a priori* to all objects of experience given under the forms of space and time.

With this general plan of the argument in view we should be in a better position to interpret the details of Kant's statement.

§ 2. *Unity in Judgement*

'The same function which gives unity to the different ideas *in a judgement* also gives unity to the mere synthesis of different ideas *in an intuition*.'³

The 'function' with which Kant is here concerned must be the work proper to understanding, namely thinking or judging. It must, in fact, be 'the function of thinking', which, when we attend only to its form, 'can be brought under four heads, each of which contains three moments'.⁴ This general function of thinking, which according to Kant manifests itself necessarily in the twelve forms of judgement, is now alleged to do two things; of these the first is to 'give unity to the different ideas in a judgement'.

I take this to be the doctrine which Kant has already expressed, not altogether happily, in saying that all judgements are functions of unity (that is, of unification) in our ideas.⁵ Every judgement is supposed by Kant to unite different ideas:⁶ the categorical judgement unites (or relates) the subject-concept and the predicate-concept, while hypothetical and disjunctive judgements unite (or relate) different judgements

¹ B 159.

² Compare the statement in A 76-7 = B 102, and also the assertion that categories are concepts of the 'pure synthesis' and that the synthesis of the manifold of pure intuition is necessary for *a priori* knowledge of *all* objects (A 78-9 = B 104).

³ A 79 = B 104-5.

⁴ A 70 = B 95.

⁵ A 69 = B 94. For criticism of this phrase, see Chapter XII § 2; for the general sense in which judgement unifies ideas, see Chapter XII § 5.

⁶ Compare *Log.* § 17 (IX 101).

(which, I presume, are themselves categorical).¹ Nevertheless in the present passage, as in the previous one,² I believe that Kant's main concern is not with the unification of concepts or judgements, but with a more elementary and fundamental aspect of thought. In all judging or conceiving we unite different intuitions (that is, intuitions of different objects) under a concept; or, more simply, we hold many individual objects before our minds by means of a common mark (or marks).³ The different ideas united in the judgement are the individual objects⁴ referred to by the judgement; and they are united in the sense that they are thought together in virtue of their common characteristics.

This is, I think, sufficient for our present purposes, and the various complications and difficulties involved cannot be considered here. To judge is essentially to think together a plurality of individuals by means of concepts, and it is quite untrue to say that this doctrine holds only of universal judgements.⁵ The simplest case to consider is that in which we unite a plurality of individuals under one concept as in the judgement 'This is a house' or 'There are houses'.⁶ Neverthe-

¹ See A 73 = B 98 and B 140-1. If we desire a general formula to cover all cases, we can say that every judgement brings given *cognitions* to the objective unity of apperception. We should also remember that the form of a judgement consists in 'the determination of the way in which the different ideas, as such, belong to' (or are united in) 'one consciousness'; see *Log.* § 18 (IX 101).

² See A 69 = B 94 and compare Chapter XII § 5.

³ The example previously given was the holding of bodies before the mind by the common mark of divisibility; see A 69 = B 93-4.

⁴ Every individual object is, for Kant, given in intuition (or capable of being given in intuition), and is itself a complex intuition bound together by necessity. Kant's use of the word 'intuition' or 'idea' for the object of a true judgement is apt to produce misunderstanding, yet it serves to bring out the fact that his philosophy is not representative idealism but empirical realism.

⁵ I have already pointed out, in Chapter XII § 5, that to conceive a universal is to think a mark which belongs, at least potentially, to a plurality of individuals, even if we apply it in a singular judgement.

⁶ We need not consider whether other concepts are involved even here. I choose the singular judgement as one of my examples deliberately—this house is united with other houses in a class.

less we should note that in judgement we do more than unite in a class the different instances to which our concepts, taken separately, refer: we also unite (or separate) the classes themselves according to the way in which we unite (or separate) the concepts. Hence the whole judgement—and not merely the separate concepts of which it is composed—may be said to unite the individuals to which it refers, and in the different forms of judgement the individuals referred to are united in different ways.¹

It should also be remembered that the procedure of bringing different ideas (or objects) under a concept has been described as analytic.² To bring different ideas (or objects) under a concept is presumably to unite them under that concept; and if so, the procedure of uniting ideas (or objects) under a concept must also be described as analytic. This analytic aspect is present in every judgement and in every form of judgement.

§ 3. *Unity and Synthesis*

The second task performed by the function of thinking is to give unity to the 'mere synthesis'³ of different ideas⁴ in an intuition. Here Kant is manifestly concerned with the synthesis of the given manifold into one complex intuition of an individual object.⁵ The 'mere synthesis' we may take to be the synthesis which is the 'mere working' of imagination,⁶

¹ Kant, in dealing with the different forms of judgement, commonly deals with '*Umfang*' or '*Sphäre*', that is, with the denotation of the terms in the judgement. I do not wish to stress this unduly, but it is important as showing that differences in the forms of judgement are not irrelevant to the different ways in which the objects referred to by the judgement are united. Compare A 71 = B 96 ff. and *Log.* §§ 21-29 (IX 102-7).

² A 78 = B 104.

³ '*der blossen Synthesis.*'

⁴ 'Ideas' here are equivalent to 'impressions' or 'sensa', whereas before they were equivalent to 'objects'.

⁵ For Kant the complex intuition and the object may in some ways be regarded as identical.

⁶ A 78 = 103.

and which does not of itself give us knowledge.¹ Understanding gives unity to the synthesis of imagination, and so gives unity indirectly to the manifold synthesised.

The difficulties begin to arise when we ask ourselves what is the nature of the manifold synthesised. Kant may be speaking about synthesis in general,² and this would be equivalent to the synthesis of the manifold of *intuition in general*,³ that is, of any and every intuition whether empirical or pure. Or he may be speaking about the 'mere synthesis' just mentioned, the synthesis of the pure manifold of time and space. On the whole I think it more probable that he is referring us back to the earlier passage which deals with 'synthesis in general'.⁴ He presumably expects us to connect what has been said about 'synthesis in general' and about 'pure synthesis', and to recognise that the thinking which gives unity to 'synthesis in general' must *a fortiori* give unity to pure synthesis (which is a particular species of 'synthesis in general').⁵

If we set aside these complications, Kant's contention

¹ A 78 = B 103 and A 79 = B 104. 'Mere synthesis' may mean synthesis in abstraction from the thought without which we have no knowledge of an object. It might, however, mean synthesis in abstraction from the given matter; and it would then be equivalent to synthesis in general.

² Compare A 77 = B 103 and A 78 = B 103.

³ '*Intuition in general*' is mentioned twice in A 79 = B 105; compare also B 144. It covers any kind of *sensuous* intuition—any intuition given to, or derived from, a passive or receptive sensibility—whether empirical or pure. It therefore covers all human intuitions, both pure intuitions of time and space and also empirical intuitions given under the forms of time and space. Kant believes (see, for example, A 27 = B 43) that other finite beings might have different sensuous intuitions given under forms other than time and space. Their intuitions would also be covered by the phrase '*intuition in general*'. As rational beings they would use our pure categories, but the 'stuff' given to these categories would be different, and so their schematised categories would be different.

⁴ The phrases used seem to echo those in A 77–8 = B 103.

⁵ He has already explained that pure concepts give unity to pure synthesis (A 79 = B 104), and that the spontaneity of thought demands that the pure manifold be synthesised *in a certain way* (A 77 = B 102). Compare Chapter XIII §§ 6 and 7.

is that thought does more than unite different objects—by methods of analysis and abstraction—under concepts of their common characteristics; it also imposes unity upon that synthesis of imagination whereby given intuitions are combined into individual objects whose common characteristics can be conceived.

We have seen that if our manifold given intuitions are to constitute *one* complex intuition of an object, they must be synthetised, and the synthesis must be brought to concepts. This means that whatever concept or concepts may be required for knowledge of an object, judgement is always required. The synthesis may vary with the particular matter given and the particular concepts employed, but there is one respect in which it does not vary: judgement must always be present; for no object can be an object, unless it is judged.

The doctrine, so far, may be accepted, and yet it may be held that judgement *recognises* the unity present in the synthesis of the manifold, but does not *give* unity to the synthesis. Kant, however, holds that the unity of the synthesis is not only recognised, but is also imposed, by judgement. If we take experience at its face value, we are compelled by the nature of our sensations to combine the given, now into a house, and now into a ship; and we *recognise* the unity of the particular matter combined when we apply the empirical concepts of 'house' and 'ship'.¹ This is, I believe, fully accepted by Kant; but he asks us to probe a little deeper, and maintains that there are ultimate principles governing such empirical syntheses, and that these ultimate principles are imposed by the nature of thought itself.² We must, for example, combine the given as a substance with different accidents, and this ultimate principle of unity is *imposed* by thought, and not

¹ Compare A 103 ff.

² The objection that the synthesis must either be wholly determined by the given, or else wholly determined by the mind, seems to me quite false. It is another example of the error which I criticised in Chapter VI § 8.

by the nature of our given sensations.¹ The synthesis of imagination, however much it may vary with the different matter given, must combine the manifold in accordance with the principles of synthesis present in judgement as such. Thought is the ultimate source of the unity of the synthesis of our intuitions; and if it did not impose this unity upon the synthesis, there could not be any object of knowledge.

This is the doctrine elaborated in the Transcendental Deduction.² It means that every object of knowledge, besides the particular structure which we *recognise* by our empirical concepts, must have a universal structure or form³ which is *imposed* by the structure—or form—of judgement as such. The present passage offers no argument in support of this contention, but merely *asserts*, in the most general way, that thought gives unity to, or imposes unity upon, that synthesis of imagination (and ultimately on that pure synthesis of imagination) without which there can be no knowledge of objects. We should take this as a hypothesis to be established later; but it must be provisionally accepted, if we are to follow Kant's attempt to connect the categories with the forms of judgement.

§ 4. *The Pure Concept of the Understanding*

Having asserted that thought gives unity to the mere synthesis of different ideas in an intuition, Kant adds that this unity, when 'universally expressed', is the pure concept of the understanding.⁴

¹ In human experience such imposition necessarily involves a synthesis of the pure manifold of time and space.

² See especially A 111, A 125, and B 143.

³ By *universal* structure or form I mean one which it shares with *all* objects, and not merely with *some* objects, such as houses or ships. If we did not combine given appearances as the accidents of a permanent substance, we could never recognise a house or a ship. The differences between a house and a ship are given to sense; but the combination of substance and accident is due to an *a priori* act of the mind.

⁴ A 79 = B 105. 'Universally expressed' is '*allgemein ausgedrückt*'; compare '*allgemein vorgestellt*' in A 79 = B 104.

We have seen¹ that Kant regards a concept of an object as a concept of the synthesis (or of the unity of the synthesis) necessary to construct that object. Here he regards the category, which is a concept of an object in general, as a concept of the unity of the synthesis which is necessary to construct any and every object of experience—that unity being imposed by the nature of judgement as such.²

§ 5. *Analytic and Synthetic Unity*

We now come to the still more difficult sentence in which Kant draws his conclusion. I will paraphrase rather than translate.

The same understanding, and by precisely the same acts, produces two results. Firstly in concepts, by means of the *analytic* unity, it brought into being the logical form of a judgement. Secondly, by means of the *synthetic* unity of the manifold of *intuition in general*, it introduces a transcendental content into its ideas. Hence we can call these ideas—presumably the ideas into which the transcendental content has been introduced—pure concepts of the understanding which apply *a priori* to objects. This is a service which Formal Logic cannot perform.

In this difficult argument certain points seem to me quite clear. Kant is carrying further his description of the two different aspects of judgement with which the previous sentence—and indeed the whole Metaphysical Deduction—is concerned. The same understanding produces two different results, not by different acts, but by precisely the same acts;³

¹ See Chapter XIII § 5.

² If the synthesis in question is the synthesis of the manifold of *intuition in general*, Kant is speaking of the pure category; if, on the other hand, it is the synthesis of the pure manifold of time and space, he is speaking of the schematised category, as in A 78 = B 104. Compare, however, Chapter XIII § 6.

³ All the acts of judgement produce the logical form of a judgement; some of these acts, namely those which give us *knowledge* of real objects, give a transcendental content to the categories. For a very difficult and doubtful development of this theory, see *Prol.* § 18 (IV 297–8).

and these acts are acts of judgement. Furthermore it produces these different results by means of two different kinds of unity, an analytic unity and a synthetic unity. These two unities must be the two unities referred to in the previous sentence. The synthetic unity is manifestly the unity which thought gives to the synthesis of different ideas¹ *in an intuition*. The analytic unity must be the unity which thought gives to different ideas² *in a judgement*.

§ 6. *The Analytic Unity*

Since the acts of the understanding are judgements, the first thing which the understanding produces³ is 'the logical form of a judgement'. We might suppose this to be a clumsy way of saying that understanding produces judgements; but in view of the close connexion between the categories and the forms of judgement, we must take Kant to mean exactly what he says. In producing judgements, the understanding produces also the form of judgement; and this form is studied in Formal Logic.

It is more difficult to see why understanding should produce the form of judgement 'in concepts, by means of the analytic unity'. Nevertheless Kant has maintained⁴ that understanding is a power of thinking, that is, of knowing by means of concepts; and that, since concepts are essentially predicates of possible judgements, all conception is judgement. Furthermore in all conception we may be said to think what is common to different individual objects, and therefore to bring them under a concept⁵ and so to unite them. As this procedure is said to be analytic, understanding in its use of concepts, and indeed in the very act of conceiving, may be said to produce the judgement—and

¹ That is, *sensa* or impressions.

² That is, objects.

³ Kant says 'produced' (*zustande brachte*). I take the past tense to mean something like 'produces, as we saw'. The main reference must be to A 70 = B 95 considered in the light of what went before.

⁴ A 69 = B 94. The same doctrine is present also in A 68 = B 93.

⁵ A 78 = B 104.

so to produce the form of judgement—by means of the analytic unity.¹

The phrase is obscure, and its detailed interpretation may be uncertain, but the general lines of the contention are clear. I see no reason to suppose that Kant is in any way departing from the doctrine of judgement with which we are now familiar. Analytic unity must be present in all judgement and in all forms of judgement; for all judgement involves conception, and so unites different objects in virtue of a common character which is thought by an act of analysis and abstraction.

§ 7. *The Synthetic Unity*

'By means of the synthetic unity of the manifold in intuition in general' understanding also, in judging, introduces a transcendental content into its ideas.

The reference to 'transcendental *content*' suggests that Kant is now explaining how the pure categories can receive a content or 'stuff' from the synthesis of time and space, and can so become schematised categories applying necessarily to all objects of human experience. That is what we might reasonably expect him to explain, both in view of the way in which he opens this chapter² and in view of his discussion of the pure synthesis. The 'ideas' into which the transcendental content is thus introduced would be the pure concepts of the understanding; and this seems to be borne out by the fact that

¹ In B 133-4 n. the analytic unity of consciousness is said to be inherent in all 'common' concepts as such, that is, in all concepts as involving the thought of what is common to different individuals. This confirms the interpretation which I have given. The fact that the much needed explanation of 'analytic unity' is given, in the second edition, in the *Transcendental Deduction*, does not mean that it has no bearing on the present passage. The *Transcendental Deduction* in the second edition attempts in its first part to connect the argument with the *Metaphysical Deduction*, just as it attempts in its second part to connect the argument with the *Transcendental Schematism*.

There are further references to analytic and synthetic unity in the *Lose Blätter*, see Reicke, Vol. I, p. 114-16, B 12.

² See A 76-7 = B 102.

the ideas in question are described as *its* ideas, that is, as ideas of the understanding.¹ Because these ideas receive a transcendental content, they can be called pure concepts of the understanding which apply *a priori* to objects.²

This is, I believe, the general direction of Kant's thought, but we must be on our guard against an undue simplification of the present statement. He does not say, as we might have expected, that understanding introduces a transcendental content into its ideas 'by means of the synthetic unity of the pure manifold of time and space'.³ On the contrary, understanding produces this result 'by means of the synthetic unity of the manifold in *intuition in general*'. '*Intuition in general*' cannot be identified with pure intuition: pure intuition is only a species of which *intuition in general* is the genus. And it is to be noted that in the following paragraph Kant says that the pure concepts of the understanding apply *a priori* to objects of *intuition in general*.

It is difficult to be sure how far Kant is stressing the technical sense in which '*intuition in general*' is employed later,⁴ but we certainly cannot set aside this possibility. If we take the 'ideas' of the understanding to be the pure concepts of the understanding, a definition of such concepts has just been given:⁵ they are concepts of the unity given by understanding

¹ It might be suggested that 'its ideas' means only the ideas with which the understanding is concerned in judging, and that understanding introduces into them the transcendental content of substance and accident, cause and effect, and so on. This would be a correct statement of Kant's doctrine, except that what is introduced would, I think, be described, not as a transcendental content, but as a transcendental form. But in any case the statement which follows—that 'on this account they are called pure concepts of the understanding'—puts this interpretation out of court. Caird's translation (*The Critical Philosophy of Kant*, Vol. I, p. 329), which makes 'they' refer to the *acts* of the understanding, seems to me impossible.

² The relative clause would then be the emphatic one.

³ Prichard (*Kant's Theory of Knowledge*, p. 164) translates as if Kant had said this.

⁴ See especially B 151. The synthesis of the manifold of *intuition in general* is said to be an intellectual synthesis thought in the *pure* category.

⁵ A 79 = B 105.

to the 'mere synthesis' of different ideas in an intuition.¹ If 'mere synthesis' is equivalent—as I rather suspect it is—to 'synthesis in general', the definition may imply that the pure categories are concepts of the synthetic unity² of the manifold of *intuition in general*.

By its acts of judgement, so far as they give us knowledge of real objects, understanding may be said to introduce a transcendental content into the pure categories, because in imposing synthetic unity on the manifold of *intuition in general*, it necessarily imposes synthetic unity on the pure manifold of time and space. The synthetic unity of the pure manifold of time and space would then be the transcendental content³ which the pure categories must receive if they are to apply *a priori* to objects of human experience. When they receive this content they may be regarded as schematised categories, the full categories which are necessary for all human experience.

Such is at any rate a correct statement of Kant's general theory, but I must confess I doubt whether he intends to make explicit here the reference to the synthetic unity of the pure manifold of time and space. We must, I think, introduce this reference, if we suppose that the 'transcendental content' is *different* from 'the synthetic unity of the manifold in intuition in general' by means of which it is said to be introduced. But it is possible, and perhaps even probable, especially in view of the following paragraph, that Kant wishes to *identify*,

¹ Compare § 4 above.

² A concept of the unity given to the synthesis of the manifold of intuition in general is a concept of the synthetic unity of the manifold of intuition in general. Compare what Kant says in A 78-9 = B 104, about pure concepts: that they give unity to the pure synthesis and *consist solely in the representation of this necessary synthetic unity*.

³ In A 79 = B 104 and A 78 = B 104 Kant has already asserted that the categories must be concepts of the synthetic unity of the pure manifold of time and space. At the present stage of the argument this may seem barely intelligible, but we shall discover in the Principles that all the categories—and notably those of substance and accident and cause and effect—are imposed on empirical objects in virtue of the unity of time and space.

rather than to distinguish, these two things. If so, he is concerned with the pure, and not with the schematised, categories; and he is saying that the synthetic unity of intuitions *in general* (and so of all possible objects of knowledge) is demanded or imposed by the very nature of judgement or conception as such. This ultimate synthetic unity demanded or imposed by thought is the transcendental content introduced by judgement; and such synthetic unity must have different forms or aspects according as judgement itself has different forms or aspects. If we interpret Kant in this way, it is easier to understand, not only what he says immediately thereafter, but also the very real difficulties which he raises at the beginning of the Transcendental Deduction.¹

There are, I admit, objections to this interpretation. If we accept it, Kant's statement fails to gather together the different threads in the preceding argument; it establishes no connexion between the synthesis of the pure manifold previously discussed and the synthesis of the manifold of intuition *in general*; and it seems to contradict the assertion that apart from the manifold of pure intuition the categories are *without content*.² I do not think that these objections are insurmountable. Kant expects us to remember that the reason why thought can impose necessary synthetic unity on our human intuitions is that they are given to us under the forms of time and space, and that the pure manifold of time and space can be synthetised *a priori*. He has already indicated that this is so, but he intends to elaborate this doctrine in the Transcendental Deduction. And although the categories have a concrete transcendental content only in the synthetic unity of the manifold of time and space (and so in the synthetic unity of all objects given in time and space), they may nevertheless have an abstract transcendental content in the synthetic unity of the manifold of intuition in general.³

¹ A 88 = B 120 ff.

² A 77 = B 102.

³ Thus in *Logik* § 5 *Anmerk.* 1-2 (IX 94) Kant indicates that the categories may *contain* something borrowed from *understanding*, and that the origin of their *matter* is intellectual; and in § 3 (IX 92) he says explicitly that the categories originate in the understanding *as regards their content*.

One point more must be added, if we are to keep clear in our minds the tasks which belong to ordinary unreflective understanding and the tasks which belong to Formal and Transcendental Logic. Understanding, in all judgements, produces the form of judgement, and this form is reflectively analysed by Formal Logic. Understanding, in all judgements which give us knowledge of objects, imposes upon the synthesis of imagination, and so upon the manifold synthesised, those principles of synthesis which are present in judgement as its necessary forms; and it is the task of Transcendental Logic to show reflectively that the forms of judgement can therefore be regarded as concepts of any and every possible object of knowledge.¹ The latter task cannot be performed by Formal Logic; but in Kant's view Transcendental Logic is only carrying a stage further the investigation of Formal Logic into the nature of judgement as such.

§ 8. *The Categories and the Forms of Judgement*

Kant's conclusion is that there are precisely as many pure concepts of the understanding as there are logical forms of judgement. This is the central contention of the Metaphysical Deduction, and whether we agree with it or not, we should now be in a position to understand its meaning.

Every judgement, as is rightly held by Formal Logic, unites ideas. It does so inasmuch as it unites the concepts or cognitions² which are its matter, and thereby unites the different ideas or objects to which these concepts or cognitions refer. The unity thus given to ideas or objects is an analytic unity: it is a unity obtained by analysis and abstraction of the common characteristics which the different objects share. Nevertheless this analytic unity has certain aspects which are independent of the particular matter analysed or judged; for every judge-

¹ The essential characteristic of any and every object of knowledge is nothing other than its necessary synthetic unity; compare A 104-5, A 109, B 137, A 158 = B 197.

² I use this term to cover hypothetical and disjunctive judgements, which, according to Kant, combine judgements rather than concepts.

ment must unite its concepts or cognitions, and consequently its objects, in certain necessary ways. The forms of judgement are the different ways in which judgement as such necessarily unites its ideas or objects; and these forms are independent of the particular nature of the concepts which happen to be employed and the particular nature of the objects which happen to be judged. If we are to take Kant's thought at its best, we must take these forms to be 'moments' present in all judgements without exception. The subordinate divisions recognised by Formal Logic are alternatives;¹ but we must regard these alternatives as merely stressing a particular 'moment' of judgement, not as excluding the other 'moments'.²

Kant has maintained that every judgement, if it gives us knowledge, also imposes unity upon the synthesis of imagination whereby given intuitions are combined into individual objects whose common characteristics are thought in the judgement. His present contention is that the forms of judgement, just as they unite ideas or objects in different ways, must also impose different kinds of unity on the synthesis of imagination; and so must impose different kinds of synthetic unity on the objects judged. These different kinds of synthetic unity will also be independent of the particular nature of the intuitions given to sense and combined into objects.

Considered in its most general aspect Kant's contention seems to me reasonable and sound. Judgement does impose an analytic unity on the objects which it judges; and this analytic unity is, and must be, expressed in whatever forms are universally necessary to judgement, whatever be the character of the objects judged. Similarly judgement does demand a synthetic unity in the objects which it is to analyse and judge; and this demand must be satisfied because the

¹ If a judgement is affirmative, it is not negative; and so on. On the other hand a judgement may be affirmative and categorical and universal and assertoric: so it is only the subdivisions which are alternatives, not the main divisions.

² A footnote in *Prol.* § 20 (IV 302 n.) suggests that for the purpose of deriving the categories the subdivisions are not to be regarded as mutually exclusive alternatives.

transcendental synthesis of imagination must combine the given manifold in one time and space. We may perhaps even go further and say that the necessary synthetic unity imposed by the transcendental synthesis of imagination on time and space, and so on all objects in time and space, is ultimately due to the demand of thought for synthetic unity in its objects and indeed in its objective world as a whole.

We are not yet in a position to decide whether the transcendental synthesis of imagination, in combining all objects in one time and space, imposes upon these objects characteristics which conform to the different kinds of synthetic unity demanded by the different forms of judgement;¹ and still less are we in a position to decide whether it does so in obedience to the demands of thought, and not merely as a consequence of the given character of time and space. These ultimate problems can be solved only in the light of Kant's subsequent account of the transcendental schemata and the Principles. All that we can reasonably ask at present is whether the different forms of thought do demand different kinds of synthetic unity in its objects.² It is difficult to state the demands which pure thought makes upon its objects; for these demands, as Kant always recognises, remain comparatively vague until we consider them in their relation to a temporal and spatial world. Nevertheless it is not impossible, even at this stage, to indicate their general character. So far as thought is conceptual, so far, that is to say, as it seeks to unite a plurality of individual objects in a whole (or class) in virtue of their common characteristics, it seems to demand that the given objects should be *in some way* homogeneous. So far as thought is assertive, so far, that is to say, as it affirms and denies and thereby delimits, it seems to demand that the given objects should *somehow* combine in themselves being and not-being. So far as

¹ Compare Chapter XXXIII for the transcendental schemata and their relation to the categories.

² The further question whether it imposes these different kinds of synthetic unity on the transcendental synthesis of imagination, and so upon all objects, is one which will fall to be considered later; see Chapter XXXIV § 3.

thought is about reality and makes a distinction between subject and predicate, it seems to demand that the given objects should *somehow* offer us an ultimate subject as well as characteristics belonging to that subject. So far as thought is based on reasons or grounds, it seems to demand that the given objects should *somehow* offer us a combination of grounds and consequents. So far as thought separates off different classes of objects from one another within a whole, it seems to demand that the given objects should *somehow* constitute a system whose different parts mutually exclude and mutually determine one another. And so far as thought is possible, actual, and necessary, it seems to demand that its objects should also be *in some way* possible, actual, and necessary.¹ Indeed do not demands of this kind seem to be necessary demands, if we accept a correspondence view of truth?

However vague this may be, it is far from meaningless, and it rests upon the necessary forms of thought, which are imperfectly expressed in the table of the forms of judgement. Its full meaning will become clear only when we can indicate those characteristics of physical objects in space and time in virtue of which the demands of thought must be satisfied. But it seems to me there is no ground for suggesting, as is so commonly done to-day, that Kant's theory is merely a confusion of thought, or that it rests on a pedantic attempt to establish artificial parallels between Formal and Transcendental Logic. His theory, no doubt, has been frequently misunderstood; but this is no reason why we should regard it as in itself unintelligible.

We should now be able to understand why Kant believed that the various forms of judgement not only play the part in thinking assigned to them by Formal Logic, but also have at least a *prima facie* claim to determine the character of the objects judged. So far as they determine the character of the object judged they are to be regarded as categories; and cor-

¹ The detailed account of the pure categories is to be found in Chapter XXXIII.

responding to the forms of judgement we have the following table of categories.¹

The categories under the head of *quantity* are unity, plurality, and totality;² under the head of *quality* reality, negation, and limitation; under the head of *relation* subsistence and inherence (*substantia et accidens*), causality and dependence (cause and effect), and communion³ (interaction⁴ between agent and patient); under the head of *modality* possibility and impossibility, being and not-being,⁵ necessity and contingency.

§ 9. *The Clue to the Discovery of the Categories*

Kant's argument in the Metaphysical Deduction is concerned, as he himself indicates, with the *clue* to the discovery of all pure concepts of the understanding. If we take it as offering a complete proof of the origin, nature, and objective validity of the categories, we cannot but regard it as arbitrary and superficial. Such a view fails to do justice to the subtlety of Kant's thinking, and we must recognise that we have here only the beginning of the long and complicated argument by which he seeks to establish his conclusions.

The position which we have now reached would have been clearer, if it had been put forward as the hypothesis which he intends to prove. Instead of doing so, Kant has chosen, not only to state the general logical position from which he starts, but also to suggest the general line of argument which he proposes to follow. There is in this procedure nothing

¹ See A 80 = B 106. For the list of forms of judgement, see A 70 = B 95.

² In spite of this order I believe that unity is connected with the singular, and totality with the universal, judgement; see *Prol.* § 20 (IV 302 n.).

³ '*Gemeinschaft*.' Latin translations are '*communio*' or '*commercium*' (see A 213 = B 260). The common English translation is 'community', but this seems to me less satisfactory.

⁴ '*Wechselwirkung*', or '*actio mutua*'; see *M.A.d.N.* (IV 545). This means the reciprocal causality or 'influence' of substances. The common translation 'reciprocity' is altogether too vague.

⁵ '*Dasein*' which may be translated 'existence', and '*Nichtsein*' which may be translated non-existence.

unreasonable; but the indications given are too brief to be other than obscure, and I have been compelled to supplement them with material drawn from the later parts of the argument. We have still to face, as Kant recognises,¹ the obvious objection that the understanding cannot impose principles of synthesis on objects which are given to sense; and we have to meet this objection by a full account of the nature of imaginative synthesis in its relation to the unity of thought, and in its relation to the pure forms of time and space under which all objects must be given. We have still to indicate the different characteristics imposed by the transcendental synthesis of the pure manifold of time and space on all sensible objects and to connect these characteristics with the forms of judgement. And we have still to show that the transcendental synthesis of imagination, in imposing unity upon time and space, necessarily imposes these characteristics on all sensible objects. This is the work of the Transcendental Deduction and of the chapters on the Schematism of the Categories and the Principles of the Understanding. To interpret Kant otherwise is to begot the whole argument, and if we fail to see it as a whole, the separate parts become unintelligible.

At the present stage we should take Kant to give us the names of the categories whose nature and validity has still to be proved. If the pure categories are to be regarded as distinct from the forms of judgement, this is possible only by supposing that they must *somehow* determine the character of things; but no real object is thought by their means,² nor do we understand how they can apply to any object. The categories have objective validity only when they are schematised. Hence Kant, by anticipation, gives to them names which belong properly to the schematised categories. Thus he speaks of the category of cause and effect, which obviously has a reference to time. We must not allow this to mislead us into supposing that he imagines himself able to extract

¹ A 89 = B 122.

² Compare B 288. If we do, and must, think things-in-themselves by means of the pure categories, the thought is empty.

the category of cause and effect merely from the hypothetical form of judgement. His doctrine ought not to be either accepted or rejected until the argument has been carried further.

The meaning of the categories is at the present stage necessarily obscure, but there is some plausibility in the contention that they are truly categories in the sense that they characterise all possible objects.¹ What is surprising is Kant's belief that, with the exception of the category of communion, their connexion with the corresponding form of judgement 'leaps to the eye';² and he regards this obvious connexion—a connexion which, as I have said, is to be properly established later—as showing their origin in the nature of thought.³ There is indeed some plausibility in the contention in certain cases. When we assert a house to be square, we are uniting the given manifold under the category of substance and accident; and again when we assert that if it rains, the ground will be wet, we are uniting the manifold under the category of cause and effect.⁴ Nevertheless it is clear that not all categorical judgements apply the category of substance and accident, and not all hypothetical judgements apply the category of cause and effect.⁵ The forms of judgement are categories only in so far as the manifold of intuition is determined in relation to them.⁶

There is no reason to suppose that Kant discovered the categories originally by means of the Metaphysical Deduction. On the contrary, he had a list of categories from the beginning, and attempted to deduce them from a common principle.

¹ Except of course in the case of impossibility, not-being, and contingency.

² B 111-12. The category of communion is connected with the disjunctive form of judgement. We shall see, in Chapter XXXIII § 4, that this connexion is as reasonable as the others. ³ B 159.

⁴ These two connexions were commonly recognised, and may have been the starting-point of Kant's theory. Compare Riehl (*Der philosophische Kriticismus*, Vol. I, p. 359), who suggests that Kant first of all connected causality with the hypothetical form of judgement.

⁵ Compare B 128-9.

⁶ See B 143. There are many puzzles about this into which I will not here enter: the first thing to do is to get Kant's central position clear.

From the dawn of the Copernican revolution he sought to find their origin in the activity of the understanding, but for some time he imagined that this origin might possibly be found in such activities as comparing, combining, and separating.¹ Later he found that all activities of the understanding could be reduced to judgement, and that judgement with its necessary forms gave him precisely what he had been seeking.² If he found himself compelled in the process of search to modify his list of categories and even to improve, as he thought, the table of logical forms, there is in this, taken in itself, no reason why his method should be regarded as irrational, and still less reason why we should reject the possibility that the categories may have an *a priori* origin in the mind.³

It is almost unnecessary to add that until Kant has demonstrated the *a priori* and systematic character of the forms of judgement, he has failed to show any ground why we should believe in the *a priori* and systematic character of the categories.

§ 10. *Analytic and Synthetic Judgements*

Before leaving the argument of the Metaphysical Deduction we must notice an interpretation which has had great influence in this country.⁴ Formal Logic is supposed to concern itself only with a *special* type of judgements, called analytic judgements,⁵ in which alone is to be found the form of judgement.

¹ *Nachlass* 3930 (XVII 352). We ought not, however, to exclude the possibility that Kant in his own mind connected these operations with judgement.

² See *Prol.* § 39 (IV 323).

³ We might as well suggest that Mathematics is not *a priori*, because the earliest mathematical discoveries were made as the result of a process of trial and error.

⁴ It is expounded—in different forms—by Caird and Kemp Smith.

⁵ Analytic judgements are judgements made by the analysis of a *subject-concept*. To regard judgements made by analysis of an *object* as a subdivision of analytic judgements is a confusion. To combine judgements made by analysis of a subject-concept, and judgements made by analysis of an object, into a *special* class of judgements, studied by Formal Logic and opposed to synthetic judgements, is to make confusion worse confounded. Compare Chapter X §§ 6–7.

Transcendental Logic is supposed to concern itself with another type of judgements, called synthetic judgements, which are productive of the categories. These two types of judgement involve fundamentally different acts, and they are alluded to when Kant speaks of analytic and synthetic unity.¹

The difficulty then arises how Kant can say that the form of judgement and the transcendental content of the categories are produced by *precisely the same acts*. On this point he could not be more emphatic. Nevertheless his emphatic statement is watered down into a quite different statement—that understanding produces these two results by *different, but analogous, acts*. It is then insisted that there is no analogy whatever between the acts; and at times a half-hearted defence of Kant is offered us on the curiously irrelevant ground that analysis presupposes synthesis. When we read the resulting disquisitions on Kant's blindness and perversity, his incapacity to understand the implications of his own argument and his devotion to an external architectonic, we do well to remember that, in spite of all the pages that have been written about his misleading analogy between synthetic and analytic judgements, there is not a single sentence, throughout the length and breadth of the *Kritik*, in which this analogy is so much as mentioned.

Kant means precisely what he says, and on this point he is right. Difficult and doubtful as his theory may be, we can understand why he believed in it, as soon as we grasp that the analytic unity, and the form of judgement, must be present in all judgements without exception.² To suppose that the

¹ In A 79 = B 105. I must confess that even after I had succeeded in freeing myself from the main errors in regard to analytic judgements, I was still unable to break away from the view that Kant was referring in this passage to the difference between analytic and synthetic judgements; see *Mind*, Vol. XL, N.S. No. 159.

² Adickes (in his edition, p. 120) recognises quite clearly that *all* judgements are analytic in the sense of possessing analytic unity, and that this has nothing whatever to do with the limited class of technically analytic judgements.

forms of judgement are present only in one kind of judgement, and the categories only in another kind of judgement, is to make Kant's whole argument, not only in the Metaphysical Deduction, but in the Transcendental Deduction and in the Analytic of Principles, completely unintelligible.

CHAPTER XV

THE CATEGORIES

§ 1. *The Categories*

The difficult task of following Kant's argument in the Metaphysical Deduction is now completed, and the present chapter will be concerned only with relatively minor questions in regard to the categories.

The categories, as pure concepts of the understanding, are naturally contrasted with empirical concepts, but such a division ignores the existence of mathematical and factitious concepts. At times it is desirable to make a clear distinction between the categories and all other concepts. For this purpose I describe the categories as '*universal*' concepts and contrast them with '*particular*' concepts. A '*universal*' concept, in this special sense, is one which applies to any and every object; while a '*particular*' concept applies only to *some* objects, that is, to objects of a particular kind. Empirical, mathematical, and factitious concepts may all be called '*particular*': they apply to some objects and not to others.¹

It should be observed that Kant gives no definition of the separate categories, although he hints that he might be in a position to do so.² Later on³ he says that apart from the conditions of sensibility—that is, apart from the forms of time and space—they cannot be defined. By this he means that they can have no *real* definition, a *real* definition being one which not only analyses a concept and so makes it distinct, but also shows that it contains a mark whereby the *object*⁴ to which the concept refers can be recognised with certainty. Each pure category can, of course, be defined as the concept of a par-

¹ Compare Chapter IX §5.

² A 82 = B 108.

³ A 241-2; A 240 = B 300.

⁴ In a real definition the thing defined (the *definitum*) is the object and not merely the concept, and the possibility of the *object* must be made intelligible; see A 241-2 n. and B 300.

ticular form of judgement which is supposed *somehow* to characterise all things without exception.¹ Kant never varies, so far as I can see, in his belief that the pure categories, when we abstract from all reference to time and space, must be regarded as concepts, not of an *object* in general, but of a *thing* in general, that is, of things as they are in themselves. Indeed so far as we can think things-in-themselves at all, we must do so by means of the pure categories, for all thinking contains the forms of judgement; but such thought, apart from intuition, is so vague as to be meaningless; more exactly, all relation to objects falls away in the sense that 'we cannot through any example make comprehensible to ourselves what sort of a thing is to be meant by such a concept'.²

It is only as schematised that the categories can have a *real* definition, since it is only because of their relation to the synthesis of time and space that we can establish their necessary applicability to all objects of human experience. We may, if we will, maintain that the schematised categories are the only real categories; for it is by them alone that we have knowledge of the universal character of real objects. It is sometimes held that Kant ought not to have considered the pure categories at all, but should have confined himself to the schematised categories. Such a view is inevitable, if we accept the perverse misinterpretations of the Metaphysical Deduction prevalent in this country; and, even apart from these misinterpretations, the theory that the schematised categories are involved in the

¹ Or, in Kant's language, to be 'the condition of the possibility of things themselves'; see A 242.

² A 241 = B 300. When Kant says, as he does repeatedly, that the pure categories are without sense and without meaning (*ohne Sinn und Bedeutung*), he is not denying that the pure concepts have as their content the principles of synthesis contained in the forms of judging; he is only asserting that we have no means of showing their objective validity, that is, of showing how they can apply to any real object. He even asserts (in A 239-40 = B 299) that mathematical concepts would be without sense and meaning, unless we could give corresponding examples in *empirical* intuition. All this will be discussed more fully in Chapters LIV-LVI.

nature of time and space as such,¹ and have nothing to do with principles of synthesis imposed by the nature of human thought, is worthy of the most serious consideration. It is, however, a theory fundamentally different from that of Immanuel Kant; and if we have understood the Metaphysical Deduction, we must see that whether Kant is right or wrong, his doctrine is a consistent whole of which the relation of the schematised categories to the pure categories is an absolutely essential part.

In view of the importance of the schematised categories, it is often convenient to refer to them simply as 'categories'—this is in fact the common practice of Kant himself. When the pure categories alone are in question, they should be called explicitly 'pure categories'.

§ 2. *Trichotomy of the Categories*

In a passage added in the second edition Kant points out that there are three categories in each class. The third category in each class arises from a combination of the second with the first. It requires, however, a special act of the understanding to produce the third category, and it must not be thought that the third category is a derivative, rather than an original or primary, concept.²

In his defence of the independence of the third category Kant goes so far as to suggest that the third category may not be applicable in cases where the first two categories are. He suggests that number, for example, which is the schema of the category of totality,³ may not be applicable in cases where plurality and unity are: it may not apply to infinity.⁴ I doubt whether this is a good argument, since the categories are concepts of objects, and no category, properly speaking, applies to infinity, which is not an object at all. Furthermore a category which did not apply to every object would not be a category.

¹ I take this to be the view of Professor Alexander.

² B 110–11. Compare *Prol.* § 39 (IV 325 n.).

³ This will be explained in Chapter XXXIII § 2.

⁴ Compare also letter to Schulz (X 344–5) translated by Kemp Smith, *Commentary*, p. 199. I suppose that the theory of transfinite numbers throws doubt on Kant's contention.

Kant is, however, clearly right in saying that the third category is, in each case, a concept as ultimate as the other two.

Kant seems to me to be also right in saying that the third category involves a combination of the first two. This is obvious in the first three classes of categories, and for the present we may perhaps be content to await his explanation of the dark saying that necessity is existence (or being) given through possibility itself.

This doctrine of Kant is one of the roots of the Hegelian dialectic, and it is unreasonable to dismiss it as due to a superstitious preference for the number three. Kant's divisions are not dominated by the number three; there are, for example, four classes of categories and two forms of intuition. Our business is to understand his divisions, and not to dismiss them as irrational.

The only division possible by *a priori* principles is, according to Kant, dichotomy, which depends on the principle that everything must be either A or not—A. Polyotomy, as he calls it, depends upon intuition, which may be either *a priori*, as in mathematics (e.g. in the case of conic sections), or empirical, as in the case of natural science. There is, however, also a trichotomy which depends upon the *principle* of *a priori* synthesis. Three things are necessary for every *a priori* synthesis: (1) a condition, (2) a conditioned, and (3) that which arises from the union of the two.¹ This is important to remember when we come to study the schemata.

One can only wish that Kant had explained how these principles of division are manifested in his table of the logical forms of judgement.²

§ 3. *The Categories and Generic Concepts*

Kant has been criticised on the ground that he confuses categories with generic concepts, and makes the mistake

¹ Log. § 113 (IX 147–8). Compare *K.d.U.* (V 197 n.) and letter to Schulz (X 344).

² He apparently considered that they did apply. See *Nachlass* 3067 (XVI 639).

of viewing the categories as if they were possible predicates, whereas their real function is to articulate the judgement as a whole.¹

I fail to see the point of such a criticism. Every concept is in a sense a generic concept—in the sense, namely, that it applies to a number of individual instances;² and every concept is the predicate of a possible judgement. To this rule the categories are no exception.³ It is of course true that they may articulate the judgement as a whole, and even that they normally do so. In the judgement 'If the trigger is pulled, the cartridge will explode' the manifold is synthetised under the concept of cause and effect. I cannot, however, detect the slightest impropriety in saying that the pulling of the trigger is the cause, and the explosion of the cartridge the effect; or even in saying that the two events together are a particular instance of cause and effect.

In this matter Kant, so far as I can see, suffers from no confusion and is guilty of no mistake.

§ 4. *The Predicables*

There are a certain number of pure, but derivative, concepts of the understanding which Kant calls 'predicables'.⁴ He suggests that these are derived by combining the categories with one another and with the modes of pure sensibility.

Kant believes that such derivative concepts could be worked out easily with the help of handbooks of Ontology, such as the *Metaphysica* of Baumgarten. This task, while obligatory for

¹ See Kemp Smith, *Commentary*, p. 335, etc.

² Except in the case of concepts which can have only one instance, as e.g. the concept of an omnipotent being.

³ The categories, like any other concepts, are made 'clear' only when they are 'extracted' from experience by means of analysis; compare A 196 = B 241, A 86 = B 118-19, and B 1-2. Compare also *Logik* § 5 (IX 93-4). This is not in the least inconsistent with the theory that their logical or objective origin is to be found in the nature of thought or judgement as such.

⁴ A 81-2 = B 107-8; A 204 = B 249 ff.: *Prol.* § 39 (IV 324, 325 n.).

BOOK V

THE TRANSCENDENTAL DEDUCTION
INTRODUCTORY EXPOSITION

CHAPTER XVI

THE PROBLEM

§ 1. *Divisions of the Transcendental Deduction*

The Transcendental Deduction of the Categories has, it must be remembered, two sides, an objective side and a subjective side.¹ In the first edition it is divided into three sections: (1) an introduction, (2) a provisional exposition, and (3) an authoritative exposition. In the second edition the second and third sections were withdrawn, and a new and clearer statement put in their place.

The first section is thus the only one which is retained in the second edition. It was no doubt retained because of the lucidity which distinguishes it alike from the Metaphysical Deduction and from the rest of the Transcendental Deduction in the first edition. It is divided into two subsections, the first² of which states the problem, and the second³ Kant's method of solution. In the present chapter we shall be concerned only with his statement of the problem.

§ 2. *Principles of a Transcendental Deduction*

The word 'deduction', Kant explains, is used in its juristic, and not in its logical, sense. It is concerned with vindicating a right, and not with establishing a fact. The Transcendental Deduction of the Categories attempts to show the legitimacy of applying the categories to objects, and it might in English be called a 'justification', rather than a 'deduction', of the categories.

The use of the word 'deduction' is apt to mislead beginners. They not unnaturally expect an account of the way in which the separate categories are 'deduced' from the forms of judge-

¹ See Chapter XI §§ 10-11.

² § 13, 'The Principles of a Transcendental Deduction in general.'

³ § 14, 'Transition to the Transcendental Deduction of the Categories.'

ment and are disappointed to find that no attempt is made to deal with the separate categories at all. The Transcendental Deduction is concerned with categories in general. For discussion of detailed categories we must wait in patience until we come to the *Analytic of Principles*.

It must be clearly understood that Kant, both in § 13 and in § 14, has in mind, not only a transcendental deduction of categories, but a transcendental deduction *in general*. Every *a priori* idea requires, as we shall see, a transcendental deduction or justification. This is true of time and space as well as of the pure concepts of the understanding. Kant's interest, however, is, as we should expect, directed chiefly to the categories, and only in a secondary degree to the forms of intuition.

In Kant's statement of the problem there are three main points: (1) that the deduction of all *a priori* ideas must be transcendental and not empirical;¹ (2) that such a deduction is indispensable;² and (3) that there are difficulties in the deduction of categories which do not arise when we deal with time and space.³ In a final paragraph⁴ the first two points are re-emphasised with special reference to the category of cause and effect.

§ 3. *Empirical and Transcendental Deductions*

For many of the concepts employed in human thinking no deduction or justification is ever supplied, and for some of them perhaps no deduction is necessary. We are, for example, entitled to use an empirical concept—such as the concept of swan—if we find objects corresponding to this concept in our experience.⁵

¹ A 84-7 = B 116-19. Compare §§ 3-5 of this chapter.

² A 87-8 = B 119-21. Compare § 6 of this chapter.

³ A 88-91 = B 121-3. Compare §§ 7-9 of this chapter. '*Er muss aber auch die unvermeidliche Schwierigkeit. . .*'—or, in Kemp Smith's translation, 'At the same time, if he is not to lament. . . .'—marks the beginning of a new discussion.

⁴ A 91-2 = B 123-4. Compare § 10 of this chapter.

⁵ A 84 = B 116-17. That we should find such objects in experience is easy to understand, since empirical concepts are derived from experience by abstraction.

There are other concepts in common use—such as ‘luck’ and ‘fate’—which are illegitimate.¹ This is shown on the rare occasions when their validity is challenged; for on examination they are found to have no justification either in experience or in reason.

Kant assumes that in human knowledge there are concepts—such as cause and effect—which are marked out² for pure *a priori* use, that is, for use independently of experience.³ Such use cannot be adequately justified by an appeal to experience; for experience can never give us that universality and necessity which are the criteria of the *a priori*.⁴ A justification of such use must, however, be given: if we are to employ concepts in this way, we must explain how they can be related to objects which are not obtained from any experience.⁵

¹ A 84 = B 117, ‘*usurpierte Begriffe*’; compare A 228 = B 280. I presume these must be classed among ‘factitious’ concepts; see Chapter IX § 5.

² ‘*bestimmt*.’ Kant is here describing the *prima facie* character of the categories—it is the business of the Transcendental Deduction to show that concepts which seem to possess this character really do so; compare A 95.

³ Note that in A 86 = B 119 it is their *future* employment which is said to be independent of experience. No doubt their employment is always independent of experience, though we can make them ‘clear’ to ourselves only after we have actually used them in experience; see A 196 = B 241. But once we have made them ‘clear’ and recognised their true character, we know that thereafter their employment by us must be independent of experience, and consequently we cannot find their justification by the method of Locke.

⁴ Compare A 91–2 = B 123–4.

⁵ A 85 = B 117. I do not think this need mean more than that *a priori* concepts must apply to objects which we have not experienced. It might perhaps also mean that the matter or content of these concepts is not ‘borrowed’ from experience (or is not dependent on what is given to sense); compare A 86 = B 118, where these concepts are said to be related to their objects without having ‘borrowed’ from experience anything for the representation of these objects. I see no need to suppose that Kant is referring explicitly to things-in-themselves. If we assume—I think unnecessarily—that he is making such a reference, then he has in mind the claims of a ‘transcendent’ rationalist metaphysics; and he has a perfect right to treat these claims as an open question in stating the problem which is raised by the assumption that we possess *a priori* concepts. Furthermore—

The justification of the pure *a priori* use of the categories is called the Transcendental Deduction.¹

A transcendental deduction must be sharply distinguished from an empirical deduction. The former finds the *origin* of concepts in the nature of mind itself, and thereby establishes their objective validity. The latter examines our method of *acquiring* concepts; that is, it explains how we gradually disentangle them from experience, and make them 'clear' in our consciousness; it explains, in short, how concepts are acquired by experience and reflexion upon experience.² I take it that an empirical deduction is, in the case of empirical concepts, really a deduction or justification—the only justification they can have. In the case of *a priori* concepts, although we can properly give a similar psychological account of their acquisition,³ this would not correctly be called a deduction, since it would not justify their *a priori* use.⁴

If we are to follow Kant's argument, we must distinguish clearly between the *origin* and the *acquisition* of concepts; and we must recognise that the latter alone is a temporal process, the study of which belongs properly to empirical psychology.

§ 4. *Space and Time and the Categories*

So far Kant has been thinking, at least primarily, of the categories. He now points out that pure concepts are of two

and we ought never to forget this—Kant himself always holds that the *pure* categories are not limited through the conditions of our sensuous intuition, but have an unlimited field (compare B 166 n. and B 148): we must *think* things-in-themselves by means of the pure categories, although such thinking is not *knowledge*.

¹ A 85 = B 117. In this passage Kant speaks as if the essential concern of a transcendental deduction were the *objective validity* of *a priori* concepts, but this in turn depends on the explanation of their *origin*; see Chapter XI § 3.

² Kant might seem to have in mind here the acquisition, or making, of concepts as regards their form, but as the deduction in question is empirical, it must be psychological rather than logical; compare Chapter IX § 6 and see also A 86 = B 118–19.

³ A 86 = B 118; compare A 94 = B 126.

⁴ A 87 = B 119.

distinct kinds, according as they originate in sensibility or in understanding.¹ Space and time belong to the first kind. They are forms of sensibility, and are concepts only in the looser sense of the word,² being pure intuitions rather than pure concepts. The categories, as pure concepts of the understanding, belong to the second kind.

The difference between these two types of pure concept must not be allowed to obscure their common character. Neither type is the result of generalisation from experience, and the relation of both types to objects is completely *a priori*. Hence in neither case can we justify them—as we can justify such a concept as ‘swan’—by showing that experience supplies us with corresponding objects. We have to show that all objects *must* be spatial and temporal, and *must* possess categorial features. This necessity can never be established by an appeal to experience.

Needless to say, if these concepts are not pure concepts, Kant’s contention falls to the ground. If, on the other hand, we assume them to be pure concepts, Kant is certainly right. Anyone who attempts an empirical justification (or deduction) of pure concepts, while admitting them to be pure concepts, shows beyond question that he does not understand what a pure concept is.³

§ 5. *Psychological Development in Time*

This does not mean that an empirical or psychological investigation of the gradual acquisition of these and other concepts in our experience is either impossible or undesirable. On the contrary, it is of the greatest service, as is shown by the pioneer work of Locke.⁴

In this passage again, as so often—although not often

¹ A 85 = B 118.

² This looser sense is very often used by Kant. When he wants one word to describe space and time and the categories together, he generally calls them *a priori* concepts (*Begriffe*) rather than *a priori* ideas (*Vorstellungen*), which would be a more exact description. Even by themselves space and time are frequently referred to as concepts.

³ A 87 = B 119.

⁴ A 86 = B 119.

enough to convince his critics—Kant repudiates the view that he is offering an account of the development of our experience in time.¹ He distinguishes clearly and correctly between an empirical or psychological enquiry, which deals with temporal development, and a transcendental enquiry, which does not. It is psychology which must seek in experience the occasioning causes which lead to the production of pure concepts; and it is sense-impressions which give the first inducement or stimulus to manifest² our whole powers of cognition in relation to these sense-impressions, and so to bring about experience.

We must never forget that 'experience' is a technical term, and involves two factors: a matter given to sense, and a form imposed by pure intuition on the one hand and by pure understanding on the other. It is only when we receive sense-impressions that pure intuition and pure thought come into play, and give rise to space and time and the categories. Without both matter and form there is nothing which could be called human experience.

A statement so clear and unqualified at the very beginning of the *Transcendental Deduction*, supported as it is by a similar statement at the beginning of the *Analytic of Concepts*,³ ought to put out of court, once and for all, any interpretation which supposes Kant to explain how we begin by knowing space and time and the categories, and then proceed to build up experience by their means. Sense-impressions, space and time, and the categories are at work in experience from the start, but it is only gradually that we disentangle them from one another.

It is both perverse and unfair to insist on importing psychological interpretations into Kant, and then to condemn him for being muddle-headed, because his argument, when so interpreted, is absurd.⁴

¹ Compare A 66 = B 91 and Chapter III § 3.

² A 86 = B 118, '*eröffnen*'.

³ A 66 = B 91.

⁴ It may be objected that Kant's doctrine is psychological so far as it ascribes the origin of space and time to sensibility and the origin of the categories to thought. If we choose to call this psychology,

§ 6. *Necessity for a Transcendental Deduction*

We now come to Kant's second main point. We have seen that if there is to be any justification of the pure concepts, it must be a transcendental deduction, and not an empirical one. Kant has now to show that such a deduction is indispensable.¹

The necessity for a transcendental deduction is not obvious in the case of space and time, although in the Aesthetic such a deduction has already been given.² Space and time were justified or deduced as *a priori* ideas, because we traced them to their roots in human sensibility, and showed thereby that they were necessarily valid of all objects given to sense, and of such objects alone.³

Although such a deduction has been given, the need for it, Kant insists, is not obvious. The geometrician does not require a birth-certificate⁴ from the philosopher, before his progeny can be regarded as legitimate. On the contrary, geometry, quite independently of philosophy, takes its own sure and certain way, and gives us pure *a priori* knowledge, whose validity, Kant believes, no sensible person can doubt.

The reason for the certainty of geometry we have already seen. Geometry is grounded on the pure intuition of space, and therefore can offer us *immediate* evidence or certainty.⁵ Furthermore, in geometrical knowledge objects are already given *a priori*⁶ in intuition, so far as their *form* is concerned.⁷

It is certainly not empirical psychology, and nothing but confusion can arise from any suggestion that it is. We have only to consider the nature of the argument in the Aesthetic and in the Metaphysical Deduction in order to see at once that this is so.

¹ A 87 = B 119.

² A 87 = B 119-20. Compare Chapter V § 2. This 'transcendental deduction' of space and time must cover the whole argument of the Aesthetic including the 'Conclusions'.

³ A 87 = B 119. The last clause is, I think, implied in the word '*bestimmt*'.

⁴ Compare A 86 = B 119.

⁵ Compare A 160 = B 200, and *Log. Einl.* III and IX (IX 23 and 70).

⁶ They are given only because we have constructed them; compare B 130 and B 137-8.

⁷ Compare B 147 and A 239-240 = B 299.

Geometry does not use the concept of space beyond the world of outer sense; and since space is the pure form of outer sense, geometrical knowledge must manifestly apply to objects of outer sense.

The categories are on an entirely different footing. They are not, like space and time, obviously related to objects. For them a transcendental deduction is absolutely indispensable, and it is because of them that we are forced to give a deduction of space and time as well.

In applying the categories to objects we are not making use of predicates which are derived from empirical intuition (as are empirical concepts) or from pure intuition (as are the concepts of spatiality and temporality and all mathematical concepts). On the contrary, we are making use of predicates derived from pure thought, and indeed (if we assume the truth of the Metaphysical Deduction) derived from the form of judgement itself. Hence we cannot find an object for them in what is given to sensuous experience, as we could if they were empirical concepts; and we cannot find an object for them by constructing it *a priori* in pure intuition, as we could if they were mathematical concepts. Their claim is to apply universally to all objects without any reference whatever to conditions of sensibility.¹

The difficulty in regard to the categories is this. On the one hand, as pure categories, they would seem to apply necessarily to all objects whatsoever (including things-in-themselves);² and on the other hand, when we look for objects to which they must apply, we can at first sight find in objects (whether given in empirical or in pure intuition) nothing which justifies such

¹ A 88 = B 120. The text is perhaps corrupt, but the general sense is plain. The doctrine of the last sentence is to be found also in B 148; B 166 n.; B 305-6; *K.d.p.V.* (V 54); and in many other places.

² This claim is not only a rationalist assumption; it is involved in the very nature of the pure categories as discovered by Kant. Compare Adickes, *Kant und das Ding an sich*, Abschn. IV, pp. 38-74—I cannot, however, accept all his conclusions. Compare also Chapter II § 4, where the emptiness of thought about things-in-themselves by means of the pure categories is explained.

application.¹ Hence suspicion is inevitably aroused as to the objective validity of the categories—do they apply to any objects at all? Suspicion is also aroused as to the limits of their employment²—can they give us knowledge beyond the limits of the sensible world? It is this double suspicion which makes a transcendental deduction indispensable. Without such a transcendental deduction, the whole procedure of philosophy is blind; it gives rise to manifold aberrations, and ends only in the ignorance from which it began.³

When suspicions of this kind are once aroused, they are inevitably directed also to space.⁴ If we can seem entitled to apply the pure category beyond the limits of sensible experience, why should we not be entitled to do the same with our idea of space? If we can know that God is a substance, might we not also know that God is a spatial substance? Such a doctrine would never arise in the development of geometry, but it might be put forward by a philosopher.⁵

It was because of such possibilities, and not because of the need for justifying geometry, that a transcendental deduction of space was necessary. The negative side of such a deduction is as important as the positive. By showing that space is a form of sensibility as well as a pure intuition, Kant did not merely establish the objective validity of geometrical concepts; he also set the limits (the world of outer sense) beyond which geometrical concepts have no title to pass.

¹ Compare A 137 = B 176: 'Pure concepts of the understanding, being quite heterogeneous from empirical intuitions, and indeed from all sensuous intuitions, can never be met with in any intuition.' See also the questions of Maimon and Kant's answer in a letter to Herz (XI 50 ff).

² Kant could not have said this, nor what follows, if he had still believed that categories as applied to things-in-themselves could give us knowledge.

³ A 88 = B 121.

⁴ And of course to time, but Kant is concerned primarily with geometry.

⁵ See B 71, and compare *Diss.* § 22 *Scholion* (II 410). This supposition is not merely fanciful, as may be seen from the doctrines of Malebranche, Spinoza, and Henry More (the Cambridge Platonist).

§ 7. *Difficulty of Deducing the Categories*

A transcendental deduction of the categories is not only more necessary, it is also more difficult, than a transcendental deduction of space and time.¹ This is the third main point which Kant seeks to establish in § 13.

In the case of space and time it was easy to show, both that they are known *a priori* in themselves, and also that they apply necessarily to objects.² In this way, Kant adds, we showed how a synthetic knowledge of objects was possible independently of experience.³ A synthesis in space and time has objective validity, because space and time are pure intuitions whose content is the form of intuition. Since an object can appear, or be an object of empirical intuition, only under these forms, space and time contain in themselves *a priori* the condition of the possibility of objects *as appearances*, and a synthesis of space and time must govern the objects *as appearances*.⁴

In the case of the categories no easy deduction is possible, and Kant insists that we must recognise the inevitable difficulty of the argument. We must expect a certain obscurity in matters by their very nature so deeply veiled, and we must not become impatient if too much time seems to be spent in getting rid of obstacles.⁵ The absolute necessity of struggling with the argument to the end is shown by the fact that we must either complete the Critical enquiry, or else give up all claims to make judgements of pure reason in regard to what lies beyond the limits of possible experience.

¹ A 88 = B 121 and A 89 = B 122.

² Here Kant distinguishes clearly the two senses in which space and time are *a priori*.

³ In the Aesthetic Kant ignores imaginative synthesis, but he does recognise that the judgements of mathematics are synthetic *a priori* judgements.

⁴ Space and time contain the conditions under which an object is given *as an appearance*; but when we carry our analysis further—compare A 92 = B 125—we shall find that it is given *only as an appearance*, and that to know an object proper, we require thought as well as intuition.

⁵ I take this as a reference to the provisional exposition of Section 2.

It should hardly be necessary to add that Kant is not here proposing to show that the application of the categories beyond experience will give us knowledge. He is saying to the rationalists that, once the difficulty of justifying the use of the categories has been pointed out, they have no right to employ such categories beyond experience, as they are so fond of doing, unless and until there is a successful deduction or justification of the use of the categories. The result of that deduction is, in the statement of the problem,¹ properly treated as an open question. The fact that Kant does so treat it gives not the slightest ground for supposing that, at the time the passage was written, he was unaware of what the consequences of the deduction would be. His statement is perfectly compatible with the belief that when he proves the necessary application of the categories to objects of sense, he will also prove that we cannot attain knowledge by applying them to anything else.² Any other interpretation of his statement is not only incompatible with everything he says elsewhere; it is also incompatible with what he says in this very section, and even in this paragraph itself, in regard to a transcendental deduction of space and time.³

The supposition that Kant has here inserted a passage in which a *transcendental* deduction justifies knowledge of things-in-themselves⁴ is not only unnecessary, but, I venture to suggest, unthinkable.

§ 8. *Reasons for this Difficulty*

What is the source of the special difficulty which belongs to the Transcendental Deduction of the Categories?

¹ It is similarly treated in the more general statement of the problem in B 22: 'It must be possible either to extend our reason with certainty or to set it sure and determinate limits.'

² Compare Chapter II § 4. This of course does not modify Kant's view that we must *think* things-in-themselves by means of the pure categories, although we can never *know* them.

³ He can state what the consequence of a transcendental deduction of space and time is, because this deduction has already been given.

⁴ Compare Kemp Smith, *Commentary*, pp. 220-1.

The difficulty is sufficiently obvious, and arises from the fact that, on Kant's view, the categories have their origin in the understanding. This lies at the root of Kant's whole philosophy and is the reason why the pure categories must be schematised.¹ The categories are not, like space and time, conditions or forms under which objects are *given* in intuition.² Hence objects can *appear* to us (or be *given* to us) without being necessarily related to the forms of the understanding;³ and consequently the understanding would seem⁴ not to contain the *a priori* conditions of objects.

This difficulty does not arise in regard to space and time. Since objects cannot be known unless they are given to sense, they must conform to the formal conditions of sensibility. It is not so easy to see why they should conform to the conditions which understanding requires for the synthetic unity of thought.⁵ Appearances⁶ given under the forms of sense *might* be so constituted as not to accord with the forms of

¹ Compare A 137 = B 176 ff.

² A 89 = B 122. This is always Kant's view; compare B 159-60 and also B 136-7.

³ This might be taken as the inference which is naturally, but mistakenly, drawn by common sense. Such would, I think, be the obvious explanation, if Kant had said 'objects *might* appear' instead of 'objects *can* appear' (*könnten* instead of *können*)—as he does in a parallel passage (A 90 = B 123), where he says 'Appearances *might* be so constituted that the understanding would find them to be not in accordance with the conditions of its unity', a supposition which it is the business of the Transcendental Deduction to refute. Even as it is, this seems to me a possible explanation, although the sentence is better taken as expressing Kant's own view, if we stress the word '*appear*' and equate it with 'be given', as I have done, and as Kant himself does expressly in A 93 = B 125. In any case I see no reason to believe that Kant here wishes to assert as his own view the doctrine that objects *in the full sense* can appear to us apart from thought.

⁴ The imperfect subjunctive '*enthielte*' suggests, I think, that Kant is not committing himself to this supposed consequence. The understanding does not contain the conditions under which objects are given, but it does contain the conditions under which objects are thought.

⁵ A 90 = B 123. Note that the unity of *thought* is here synthetic.

⁶ If Kant had said 'appearances' instead of 'objects' in A 89 = B 122, the difficulties of his statement would disappear.

thought; for appearances can be given in intuition independently of these forms.¹ Intuition *quod* intuition is entirely independent of the form of thought,² and so appearances would present objects³ to our intuition, even if, for example, nothing in the succession of appearances corresponded to the category of cause and effect.

If we are not misled by the ambiguity of the word 'object', this is a clear statement of the problem which we have to solve. We must remember that the categories spoken of are *pure* categories. We must also remember that at this stage of the argument Kant is entitled to speak of the object—as he does in the Aesthetic⁴—on the level of common sense. The object may be taken to be a body, such as a chair. It is given to us in sense, and so must be spatial and temporal; but there is as yet no obvious reason why it should be subject to the categories, which, we have argued, originate in the understanding.⁵ When we carry our analysis further, we shall find

¹ A 90 = B 122. Compare B 145: 'The manifold to be intuited must be given prior to the synthesis of the understanding and independently of it.'

² A 91 = B 123. Compare B 132: 'The idea which can be given prior to all thought is called intuition.' I take Kant's use of 'prior' to imply logical, not temporal, priority.

³ A 90-1 = B 123. The appearances would however, as Kant has just said, be without unity, so that the presented objects would not be objects in the full sense.

⁴ Compare Chapter IV § 2.

⁵ The *origin* of the categories is the main burden of the Metaphysical Deduction, whose limitations are plainly indicated by this preface to the Transcendental Deduction; compare Chapter XIV § 9. Any difficulty that arises here is due to the fact that Kant has already, in the Metaphysical Deduction, given some indications—in my exposition I have made these indications even more explicit—of what his argument in regard to objects is going to be. Apart from this, the difficulties and objections commonly raised seem to me to arise mainly from considering this passage apart from its context. No doubt Kant would have made it easier for the reader, if he had said 'You naturally assume at this stage that the complete account of objects—in the full meaning—is simply that they are given to sense; and this is not the case, as I am about to show'. But it is one thing to admit that Kant does not give the reader all the help he might, and quite another thing to say that he is using old notes which flatly contradict his real doctrine.

that although every determinate object must be given to sense (or be capable of being given to sense), nevertheless the object as given to sense apart from thought is an object *only as appearance*.¹ it is the indeterminate as opposed to the determinate object.² If we are to know a determinate object, or an object in the full and proper sense of the word, we require thought as well as intuition; and consequently every object of knowledge must fall under the forms of thought, and so under the categories.³ Apart from the categories we have intuition bereft of thought, but never knowledge of objects.⁴

This, however, is Kant's solution, and not his problem.

§ 9. *Illustration of the Difficulty*

Kant's difficulty may be made clearer by an illustration. Let us suppose that the hypothetical form of judgement is one of the pure forms of thought under which it is claimed that every matter judged must fall. This form is a clue to the category of cause and effect, which at the present stage should

¹ A 92 = B 125. In A 124 (supposed by Vaihinger to be late) Kant says that sensibility, when not connected with understanding by means of the function of imagination, would give us *appearances*, but not *objects* of empirical knowledge, and consequently would not give us experience.

² The indeterminate object of an empirical intuition is called 'appearance'; see A 20 = B 34. The category *determines* the object *a priori*, if only through the category is it possible to *know anything as an object*; see A 92 = B 125. The indeterminate object may be said to be the matter given to sense, and it is determined by being subjected to the forms of combination thought in the categories. A determinate object must have an (intellectual) form imposed by thought as well as a matter given under the forms of sensibility; see for example A 129-30 and B 164.

It may be objected that the 'object in general' thought by means of the categories is also indeterminate apart from sense. With this Kant would agree. Apart from the condition of sensuous intuition the categories have no relation to any determinate object (A 246). Intuitions apart from concepts, and concepts apart from intuitions, are alike ideas which we cannot relate to any determinate object (A 258 = B 314).

³ *How* it can, and must, do so, is explained in the subjective side of the Transcendental Deduction.

⁴ 'Knowledge' and 'object' are here used in the strict sense.

strictly be regarded as having no reference to time. All that the hypothetical form suggests is that whatever object be given to us we should be able to judge 'If A, then B'. That is to say, it demands that any given A should be such that something different, namely B, must necessarily and universally have its *ground* in A.

Such, according to Kant, is the demand of pure thought, but we have obviously no right to assume without examination that in given appearances such a demand must be satisfied. Given appearances might conceivably be so constituted as to offer us nothing corresponding to this necessary form.

If there is to be an object corresponding to the category of cause and effect, there must be present in the series of given appearances something which will correspond to the category.¹ That something will turn out later to be necessary succession.² Apart from this the category has no reference to time, and is indeed 'empty, null, and meaningless'.³

The difficulty of proving a necessary succession of appearances in time as a correlate to the pure category is one which Kant has not exaggerated. Many philosophers would regard such a proof as not only difficult, but impossible.

§ 10. *Appeal to Experience is Useless*

We cannot evade the necessity of so difficult an investigation by saying that experience continually gives us examples of regular succession in phenomena; and that consequently we can acquire the concept of cause and effect by abstraction, and can at the same time show its objective validity, just as we can show the objective validity of any empirical concept. For Kant, and for us all, causation must involve strict universality and necessity. It is not enough that the effect should usually follow upon the cause; it must be posited through the cause and result from it. If, all other circumstances being the

¹ A 90 = B 123

² A 144 = B 183; compare Chapter XXXIII § 4.

³ This means merely that we cannot indicate any object to which it refers.

same, the cause A fails, even once, to produce the effect B, then it is not the cause of B at all. Without necessity there is no causation, and to maintain that the category of cause and effect is due merely to empirical generalisation is to assert—if we think clearly—that it is a phantom of the mind which ought to be abandoned altogether.¹

§ 11. *The Patchwork Theory*

It is not my purpose to criticise the 'patchwork' theory in detail—I have done so elsewhere.² The best refutation of this doctrine is to be found in an exposition which shows Kant's arguments to be intelligible and consistent. Such an exposition of § 13 I believe that I have now given. I have also been careful to note parallels in the second edition to the statements which are condemned as pre-Critical in the first edition. These parallels are ignored by the exponents of the patchwork theory, nor have I yet seen any attempt to prove that in the second edition also Kant filled out his argument by notes belonging to a pre-Critical stage of thought.

The subsection with which we have now dealt is, however, so straightforward and clear, in comparison with most of the Transcendental Deduction, that it is instructive to observe some of the grounds upon which it has been condemned. Such condemnation, while applying to the whole, is concentrated on those paragraphs which are concerned with the special difficulty of a transcendental deduction of the categories.

One of Vaihinger's reasons for regarding the passage as early is the negative one that imagination is not mentioned.³ Imagination, however, belongs to the solution, and to the solution on its subjective side; what Kant is stating is the problem.

Another reason is that Kant supposes the categories to be unnecessary for objects of intuition.⁴ Vaihinger objects particu-

¹ A 91 = B 123-4.

² *Proceedings of the Aristotelian Society*, Vol. XXX, vii (1930).

³ *Die Transcendentale Deduktion*, p. 35 = 13.

⁴ *Ibid.*, p. 36 = 14.

larly¹ to the statement that the categories do not represent the conditions under which objects are given in intuition.² It is astonishing that he should be blind to the fact that in this statement the emphasis is on the word 'given'.

His further objection that the categories are supposed to apply to things-in-themselves has already been sufficiently discussed, and shown to be groundless.

There is one other point on which he lays great stress. The objective validity of the categories is discussed in separation from the question of how sensuous intuitions can give us knowledge of (determinate) objects.³ Yet for the Critical Philosophy these questions are closely connected.

His contention is true, but the explanation is very simple. The problem which Kant is stating is how the categories can be valid of objects given to sense. The solution of the problem is that the categories must be valid of objects given to sense, because unless the given intuitions are thought under the categories, they would not refer to a determinate object at all. It is peculiarly unfair to Kant to argue that he is confused, because he makes a clear distinction between his problem and its solution. This is one of the many cases in which Kant is blamed because he does not write the whole of his philosophy on every page.

There could be no better illustration of the perverseness of the whole patchwork theory. I do not think it unfair to add that if the exponents of this theory can make such a mess of a passage which is relatively simple, we can have little confidence in their guidance when we come to passages which are really difficult.

§ 12. *Intuition and Understanding*

Professor Kemp Smith⁴ not only accepts Vaihinger's conclusions, but endeavours to support them by a somewhat

¹ *Die Transcendentale Deduktion*, p. 53 = 31.

² A 89 = B 122.

³ *Die Transcendentale Deduktion*, p. 53 = 31.

⁴ *Commentary*, pp. 219-22.

ambiguous doctrine of his own, which I doubt if even *Vaihinger* would have accepted.¹ He regards as pre-Critical Kant's assertion that 'representations can be consciously apprehended independently of all relation to the faculty of understanding';² and he apparently believes the Critical Philosophy to maintain that 'save in and through *a priori* concepts no representations can exist for consciousness'.³

The evidence for this view is said to appear in § 14 and in the first four paragraphs of Section 2; and corroboration is found in later passages,⁴ where the wording is, however, admitted to be not altogether unambiguous.

The passages to which Mr. Kemp Smith appeals show clearly enough that for Kant there can be no *knowledge* or *experience* of *objects*—in the strict sense—apart from the categories. To say this is, however, a very different thing from saying that no *representations* can exist for *consciousness* apart from the categories.

For Kant *knowledge* or *experience* of objects requires both intuition (with its forms) and thought (with its categories). There is in this, so far, nothing to imply that intuition could not exist in *consciousness* apart from thought, and so apart from the categories. Perhaps Mr. Kemp Smith means that in distinctively *human* consciousness such a divorce, on Kant's view, never takes place; but I cannot see that the passages to which he appeals deny the possibility of such a divorce; nor do I admit that Kant must necessarily be interpreted as asserting the possibility of such a divorce in the passages which are said to be pre-Critical.⁵

¹ *Vaihinger* recognises that 'synopsis' belongs to animals, and that Kant's views in regard to their possession of knowledge are problematic. Op. cit. p. 63 = 41.

² *Commentary*, p. 222.

³ *Ibid.* p. 223. From the context I take '*a priori* concepts' to be categories.

⁴ A 111 and A 112. The passages are quoted on p. 223 of the *Commentary*.

⁵ Even the statement ('n A 89 = B 122) that 'objects can therefore appear to us without any necessary relation to the forms of the understanding' may mean only that so far as they *appear* (or are *given* to sense), this has nothing to do with the forms of *thought*—

As I understand Kant, experience, as knowledge of determinate objects, involves a matter given to sense, and a form imposed both by sensibility and by understanding. The matter is always given under the forms of sensibility, and is never given under the forms of understanding. This does not mean that in experience when we see, for example, a red billiard-ball, we first of all see the colour red, and then proceed to bring it under the category of substance and attribute. There is no temporal succession of this kind in ordinary human experience; but nevertheless it is due to our sensibility that we see the red colour, and it is due to our understanding that we see it as the colour of a thing or object, namely a billiard-ball.

In this case the intuition, or sensation, given to sense apart from thought is separated from experience by an act of analysis, and does not exist by itself in consciousness apart from thought of an object. But although in ordinary experience we do not first receive an intuition, and then think that it is the intuition of an object, it does not follow that it is impossible to have conscious intuitions without *thinking* that they are intuitions of an object.

Whether intuitions can exist in human consciousness without being referred to an object seems to me a matter for empirical psychology; and it would be a mistake to say on *a priori* grounds that they cannot be found, for example, in the penumbra of consciousness, or in falling asleep and waking, or again in the earliest consciousness of an infant. What Kant's view on this subject was I do not know;¹ and I cannot see a doctrine which, I believe, Kant always holds. If we insist on interpreting it otherwise, then it may be taken as the common-sense inference which Kant recognises he must meet in the Transcendental Deduction.

¹ Kant's distinction of 'judgements of perception' and 'judgements of experience' in the *Prolegomena*, § 18 (IV 298)—compare B 142—suggests strongly that he believed intuitions could be present in consciousness without being referred to objects by means of the categories; but this may be dismissed as an afterthought and not a very happy one. A similar view is perhaps involved in his treatment of dreams—see B 278; A 201-2 = B 246-7; A 376; A 492 = B 520-1; *Prol.* § 13 *Anmerk.* III (IV 290)—while A 123-4 and other passages might be quoted in support of Kemp Smith's contention; but I do not find the evidence conclusive on either side.

that it is of any importance for the interpretation of the Critical Philosophy. It certainly does not affect Kant's doctrine that the categories are the conditions under which an object is thought, and are not the conditions under which an object is given.

§ 13. *Animal Consciousness*

Mr. Kemp Smith's doctrine is ambiguously expressed, but I suspect him of holding that Kant believed the categories to be conditions of consciousness as such.¹ This is borne out by his identification of 'consciousness' with 'awareness'² and his assertion that 'all awareness, no matter how rudimentary or apparently simple, is an act of judgement and therefore involves the relational categories'.³ If this is accepted, it would follow that animals—since, according to Kant, they do not employ categories or even concepts—must be without consciousness; and such is the inference which Mr. Kemp Smith actually draws.⁴

He supports his contention by reference to two passages. In the first⁵ animals are said to possess '*apprehensio bruta* without consciousness'.⁶ In this passage, as so often,⁷ con-

¹ Compare *Commentary*, p. 222: 'Relation to an object is constituted by the categories, and is necessary in reference to sense-presentations, because only thereby is consciousness of any kind possible at all'.

² E.g. p. xxxix.

³ P. xlii.

⁴ P. xlix: Animals 'must also be denied anything analogous to what we must signify by the term consciousness'. Yet he can also speak—see p. l—as if animal consciousness was distinguished from human consciousness by involving associative—as opposed to logical or reflective—*thinking*.

⁵ Sketch of a letter to Prince von Beloselsky (XI 331).

⁶ '*ohne Bewusstsein*.'

⁷ Mellin (*Wörterbuch*, I, p. 687) actually speaks as if '*Bewusstsein*' for Kant meant only self-consciousness (*conscientia*, *apperceptio*). This is a common usage of the time. Baumgarten, *Metaphysica* § 535 (XV 13), identifies '*conscientia strictius dicta*' with inner sense; compare G. F. Meier, *Auszug* § 13. In *M.A.d.N.* (IV 542) Kant says that the power of consciousness is apperception; in *Log.* V (IX 33) that consciousness, strictly speaking, is an idea that another idea is in me; and in B 158 consciousness is equated with the fact that 'I think myself'.

consciousness (*Bewusstsein*) is used by Kant to mean 'self-consciousness' or 'apperception', as is, I think, suggested by the passage itself.¹ The doctrine is made quite clear by the second passage on which Mr. Kemp Smith relies.² There Kant maintains that if it can be shown that our knowledge or experience of things is possible only under certain conditions (the forms of sensibility and categories of the understanding), then apart from these conditions sense-data would not represent *objects*, nor would they attain to that unity of consciousness which is necessary for knowledge of *self*.³ He adds: 'I should not be able to know that I⁴ have them, and they would therefore be *for me*, as a being possessed of knowledge, absolutely nothing.⁵ They might still (if I conceive myself as an animal) be able to carry on with regularity their play in me (a being unconscious of my own existence) as ideas bound together by empirical laws of association and so having influence upon feeling and desire—it being assumed that I should be conscious of each individual idea but not of its relation to the unity of the representation of the object by means of the synthetic unity of its apperception—but I should not thereby be able to know anything, not even to know this state of myself'.⁶

Mr. Kemp Smith has omitted the parenthesis which I have italicised. His ground for doing so is that Kant 'has not developed a terminology really adequate to the statement of his meaning'. The parenthesis, on the contrary, is absolutely essential to Kant's meaning. He is saying that if I were an

¹ '*Apprehensio bruta*' is opposed to '*apperceptio*'.

² Letter to Herz (XI 52), quoted in Kemp Smith, *Commentary*, pp. xlix-l.

³ For Kant knowledge of objects and knowledge of self are correlative terms—each implies the other.

⁴ I take the stress to be on the word 'I'. The words 'for me' in the next clause are italicised by Kant.

⁵ The meaning of this has been already explained in the letter itself. 'If intuitions did not conform to the conditions of experience, they would be for us *nothing*; that is, they would not be *objects of knowledge*, neither of self-knowledge nor of knowledge of other things.'

⁶ I take this to mean that I should neither know any object thereby, nor should I know the given idea as a state of myself.

animal, or if the animal part of me existed in separation, then I might be conscious of separate given ideas, but I should not be conscious of these ideas either as states of myself or as referring to objects. The categories, in short, are the conditions of knowledge both of self and of objects, but they are not the conditions of consciousness.

So far as I can discover, Kant never deviates from this general doctrine. As regards the consciousness of animals, although what he says should be taken as *obiter dicta*, there are many passages where he affirms his belief that animals are conscious, although not self-conscious; and I know none where this is denied. For example, in his lectures on Logic,¹ Kant distinguishes different grades of what may be called, in the widest sense, 'cognition'. The first grade is *idea* or representation;² the second is idea conjoined with consciousness, which is *sense-perception*;³ the third is *acquaintance*,⁴ the representation of something in comparison with other things in regard to both identity and difference; the fourth is *knowledge*,⁵ that is, acquaintance with something accompanied by what Kant calls 'consciousness', in the sense, I take it, of self-consciousness. Above these there is *understanding*,⁶ *insight*,⁷ and *comprehension*,⁸ but these we can neglect. The only point with which we are here concerned is that animals attain to the third degree of cognition; they have acquaintance with objects, though they do not know them.⁹

¹ *Log. Einl.* VIII (IX 64-5); compare A 320 = B 376-7.

² '*sich etwas vorstellen*.' This, I believe, need not be conscious.

³ '*wahrnehmen*' or '*percipere*'.

⁴ '*kennen*' or '*noscere*'.

⁵ '*erkennen*' or '*cognoscere*'.

⁶ '*verstehen*' or '*intelligere*'. This seems to be identified here with abstract conception.

⁷ '*einsehen*' or '*perspicere*'.

⁸ '*begreifen*' or '*comprehendere*'. The last two grades are here connected with reason; see also *Metaphysik*, p. 29.

⁹ It is unnecessary here to elaborate this distinction. A dog has acquaintance with, for example, meat and bread, for he is differently affected by them. He distinguishes between the two things, but he does not know wherein the differences consist. He may, for example, have in smell a clear idea of the 'mark' of meat, but he does not know that this is a mark of meat; he does not, in short, possess concepts,

It seems to me that Kant, although he is never dogmatic on the subject, believed animals to possess, not only consciousness, but a relatively high grade of consciousness. And I can see no adequate reason either for maintaining that Kant held consciousness as such to be inseparable from the categories or for condemning § 13 on such a ground.

and still less does he possess categories. Compare *Die falsche Spitzfindigkeit*, § 6 (II 59–60), where Kant also implies—what is his usual doctrine—that animals possess outer, but not inner, sense. Here as always concepts and judgements imply self-consciousness, since they imply a distinction between the self and the object. Compare *Nachlass* 411 (XV 166): ‘Animals have apprehensions but not apperceptions; hence they cannot make their ideas universal’. Other references are *K.d.U.* § 90 (V 464 n.); *Anthr. Ergänzungen aus d. Handschrift*, 141, 7 (VII 395) and *Fortschritte d. Metaphysik* (Phil. Bib. 46c, p. 95). The clearest account I have found is in Kant’s lectures on Metaphysics; see *Metaphysik*, pp. 129–30, and compare p. 119. Animals have also pleasure and pain, and this means that they are active, not mechanically, but *in accordance with ideas*; see *Metaphysik*, p. 100, and compare pp. 102 and 106. In *K.d.U. Erste Einleitung V* (Phil. Bib. 39b, p. 18) animals are even credited with ‘instinctive reflexion’.

CHAPTER XVII

THE METHOD OF SOLUTION

§ 1. *The Copernican Revolution*

In stating his problem Kant has carefully excluded any reference to his Critical solution. He has assumed only that we possess certain *a priori* categories which claim to apply necessarily and universally to all objects, and consequently cannot be derived empirically by generalisation from experience.¹ It is true that he has found the origin of these categories in the understanding and in the necessary forms of judgement—this is the result of the Metaphysical Deduction. A rationalist might, however, accept this, and might² none the less hold to the rationalist position that the mind possesses, in its own right, a power of understanding, or reason, by which it is able to grasp *a priori* the necessary and universal characteristics of things as they are in themselves. The difficulty of justifying the application of the categories to objects—a difficulty upon which Kant has laid so much stress—rests partly on the fact that hitherto he has deliberately kept it an open question whether the rationalist doctrine may not be the correct one.³

Having stated the problem, he now passes to the method of solution. He argues that a rationalist solution is impossible, and that the only way of solving the problem is to adopt the Copernican standpoint of the Critical Philosophy.

¹ We *acquire* knowledge of the categories, that is, we bring them into clear consciousness, by generalisation or abstraction from experience; but they possess a claim to universal and necessary validity which cannot be *derived* from experience, but must, according to Kant, be due to their *origin* in the nature of the mind.

² This position was actually held by some of Kant's critics. See *M.A.d.N. Vor.* (IV 474 n).

³ Compare B 22. It rests mainly on the fact that the categories and intuitions are heterogeneous; see A 137 = B 176.

There are only two possible ways in which ideas¹ can be related to their objects. Either the object makes the idea possible, or the idea makes the object possible.² The first alternative is the doctrine of realism; the second is the doctrine which alone, if Kant is right, can explain the possibility of *a priori* ideas.

§ 2. *Empirical Ideas*

If the object makes the idea possible, the idea must be empirical. This is true of appearances, as regards that element in them which belongs to sensation.³

It would perhaps be clearer to say that intuitions must be empirical so far as they are given to us in sensation, which is made possible by the object. Concepts also are empirical so far as they are derived by abstraction from such empirical intuitions; and they too are made possible by the object, since the object makes possible the empirical intuitions from which they are derived.⁴

¹ Kant uses the curious phrase 'synthetic ideas'. If this is not a misprint, he may be referring to complex intuitions—like the intuition of a chair as opposed to the intuition of a colour—and to concepts, which, as we have seen, are concepts of a synthesis.

² A 92 = B 124. A fuller statement is to be found in B XVII; compare also B 166 and A 128–9. The usual difficulty arises here as to what Kant means by 'object', and it may be argued that the word is used in two different senses; compare Prichard, *Kant's Theory of Knowledge*, pp. 15 ff. It is probably best to take 'object' at first on the common-sense level. A chair, for example, is supposed to give us our intuition of 'chair', and from this we derive the concept of 'chair' by abstraction—the object makes the idea possible. Kant argues that we could have neither the intuition of a *chair*, nor, consequently, the empirical concept of 'chair', unless we imposed upon the given intuitions the category of substance and accident; the category therefore makes the object—the chair as known to us—possible. If we accept this, the chair becomes a phenomenal object; but it is still the phenomenal cause of our sense-data, though the ultimate cause or condition of our sense-data is the thing-in-itself. No doubt this position is complicated—too complicated for either Kant or an expositor of Kant to repeat every time the word 'object' is used—but I cannot see that it is unintelligible or self-contradictory.

³ A 92 = B 125.

⁴ Compare B XVII.

So far as any idea, whether intuition or concept, is made possible by the object, it is empirical; and so far as any idea is empirical, it is made possible by the object.¹

§ 3. *A priori Ideas*

If an idea is pure or *a priori*, it cannot, on this view, be made possible by the object. We must either give up a belief in *a priori* ideas, or ask ourselves whether our ideas can perhaps apply to objects *a priori*, because it is they which make the objects possible.

This is a more difficult case. We are not considering the will, where we can have an idea of an object, and then go on to make the object real by action. What we are considering is knowledge, and it is obvious, at any rate to Kant, that in knowledge our ideas do not produce their objects, so far as *existence* is concerned. Even if we can produce an idea of an object, this does not make the object itself real.

The suggestion which Kant puts forward is this. Although an idea cannot make its object real, it might nevertheless determine *a priori* the character of the object *as known*. An idea will necessarily determine the character of all objects without exception, if only through this idea is it possible for anything to be *known* by us as an object.

This is the suggestion upon which the whole of Kant's philosophy rests.

§ 4. *Pure Intuition and Pure Concepts*

Whatever may be said about the *being* of an object, no object can be *known* without both intuition and conception or thought. Intuition is necessary, for only through intuition is an object given—yet (if we consider intuition in abstraction from thought) it is given, not as an object in the full sense,

¹ This doctrine is Kant's own doctrine in regard to all empirical ideas, so far as their *matter* is concerned. The *form*, or universality, of empirical concepts is, however, made by thinking (see Chapter IX §§ 4-6); and the forms of empirical intuitions—space and time—are due to the nature of our sensibility.

but only as an *appearance*.¹ If we are to know an object in the full sense of a real and concrete *thing*, we require also conception; for only by means of a concept² can we think an object corresponding to our intuition.³

It has been shown in the Aesthetic that space and time, as forms under which alone an object can be intuited, must have their origin in the mind, and so must condition objects *a priori*.⁴ As *given appearances*, objects must necessarily conform to these formal conditions of sensibility.

The question now arises whether there may be pure concepts or categories which, although they are not (like space and time) conditions under which alone anything can be intuited, are nevertheless conditions under which alone anything can be thought *as an object in general*.⁵ If thought as well as intuition

¹ This—it should be unnecessary to say—does not mean we should know that it was only an appearance: we should be below the level at which appearance is distinguished from reality or the subjective from the objective. Nevertheless, we can look back at this level and describe it from a higher point of view. ‘Appearance’, it should be noted, is commonly applied to the whole phenomenal object (as opposed to the thing-in-itself). Here it seems to be used for what is to-day called the *sensum* or *sense-datum* as opposed to the phenomenal object, though the commoner sense is also possible.

² The concept here may be an empirical concept—to know this red billiard-ball we must not only *see* the colour, we must *think* that it is the colour of a billiard-ball. This, however, presupposes the category of substance and accident.

³ The sense in which we must interpret such correspondence, if we accept Kant’s Critical doctrine, is discussed in A 104 ff.; compare also A 189 = B 234 ff. and A 197 = B 242 ff.

⁴ Kant adds ‘as regards the form’ (*der Form nach*). Perhaps this is parallel to the phrase in A 93 = B 126 ‘as regards the form of thinking’ (*der Form des Denkens nach*). If so, it seems to involve repetition, and means only ‘so far as the form of intuition is concerned’. It is perhaps just conceivable that Kant is referring to their empirical form—see A 127–8 and Chapter VI § 8—but I should hesitate to maintain this.

⁵ A 93 = B 125–6. Kemp Smith translates this passage: ‘The question now arises whether *a priori* concepts do not also serve as antecedent conditions under which alone anything can be, if not intuited, yet thought as an object in general’. In his *Commentary*, p. 222, he implies that the words ‘if not intuited, yet’ are not genuinely Critical. I can see no justification for this assertion.

is necessary for knowledge or experience of an object, and if there are certain conditions or forms necessary to such thought, then our empirical knowledge of objects must conform to these conditions of thought as well as to the conditions imposed by our sensibility; for unless it did so, there could not be such a thing as an *object of experience*.

§ 5. *The object*

Difficulties may again be raised, in this connexion, about Kant's use of the word 'object'. It may be urged, for example, that since there is strictly no object apart from thought, we ought not to say that the object is given or intuited as an appearance.

As against this I would maintain that although such statements may be difficult, it is hard to see how Kant's revolutionary doctrine can be stated better. If we are to follow his theory, we must set aside any view which supposes him to be describing a temporal process whereby we pass from given intuitions to knowledge of an object. We must start from the fact that we know this concrete individual object—for example, this tree. If we are to know this tree, it must be given to intuition; its colour and shape must be given to sight under the forms of time and space, and this means that the tree is so far given. But if the tree is known as a tree, thought also is present: we must employ the concept of 'tree' and indeed the category of substance and accident. There is only one object, namely this green tree; and it is known only through a combination of sight and thought. Nevertheless if we separate, by abstraction, the seeing from the thinking, the seeing would at most give us the colour, and we should not know the colour to be what it is, namely the colour of a tree; while the thinking would give us only the concept of 'treeness'¹ and no individual object

¹ Or the concept of 'green trees in general'. Indeed if we consider thinking in complete abstraction from what is given to sense, all we should have would be the empty concept of 'something', the concept of an object in general.

at all. It is only through the combination of intuition and thought that we can know the concrete determinate object.¹

If this is true, then, according to Kant, the conditions of thought, as well as the conditions of intuition, must determine *a priori* the nature of the object as known.

§ 9 *The Concept of an Object in General*

At this point we should expect Kant to remind us that the conditions or forms of thought are the forms of judgement, and that the forms of judgement as determining the synthesis of given intuitions are the categories. He has indeed referred to this doctrine, when he has asked 'whether there may not be *a priori* concepts which are *conditions* under which alone anything can be thought as an object in general';² and he makes a further reference to it in a parenthesis.³ The reader, however, is apt to be puzzled by the fact that the argument is made to turn on 'the concept of an object in general', a concept which has been explicitly connected with the categories only in the question which I have just quoted.

No doubt we have had, even apart from this question, many hints that categories are concepts of an object in general.⁴

¹ Compare A 258 = B 314: 'It is only in *combination* that *understanding* and *sensibility* can, in the case of human beings, determine objects. If we separate them, we have intuitions without concepts or concepts without intuitions, but in both cases ideas which can refer to no determinate object'. See also A 51 = B 75.

It should be noted that both concepts and intuitions are necessary to determine an object. Kant sometimes speaks as if the categories (or concepts of an object in general) determined given intuitions (or the manifold of intuition); and he sometimes speaks as if given intuitions determined the categories; see for example, B 128-9, B 143, A 251.

² A 93 = B 125. 'Conditions' are commonly equated with 'forms'.

³ A 93 = B 126: 'Experience (*so far as the form of thought is concerned*) is possible through the categories alone.' To the further doctrine of the Metaphysical Deduction—that the categories are concepts of pure synthesis—he may be said to allude, though very indirectly, when he comes to the subjective side of the Transcendental Deduction in A 94.

⁴ In A 55 = B 80 Kant speaks about pure thought of an object (or of objects), and in A 57 = B 81 about thinking objects completely

In particular the conclusion of the Metaphysical Deduction was that the categories apply *a priori* to objects,¹ and that through them alone can we think an object of intuition.² Nevertheless the exposition would have gained greatly in clarity, if Kant had asserted explicitly that the categories must therefore be regarded as *concepts of an object in general*.³

§ 7. *The Method of the Objective Deduction*

When we consider experience, we find that always and everywhere we have, in addition to the given intuitions, the concept of an object. It is this concept which makes our experience an experience, and not merely a series of sensations. The size, shape, colour, and so on, which we intuit, are always thought as the size, shape, and colour of some thing or some object.⁴

That is to say, *the concept of an object in general* is always present in, and necessary to, our experience. It is implied in all our empirical concepts, such as 'house' or 'ship'; for to be a house or a ship is to be something.

Kant believes that the concept of an object in general necessarily involves a variety of different concepts. To be an object is, for example, to have quantity and quality and to be a permanent substance with attributes, a substance interacting causally with other substances. The concept of an object in general therefore differentiates itself into concepts of objects in general,⁵ just as the form of judgement differentiates itself

a priori, and also about concepts which may refer *a priori* to objects; compare also A 62 = B 87, A 64 = B 89, A 79 = B 104, A 85 = B 117-18, etc.

¹ A 79 = B 105.

² A 80 = B 106.

³ The required assertion is made in B 128. Compare also Chapter XII § 6.

⁴ From the point of view of common sense it would be more natural to say that the concept of *thing* in general is present in all experience. Kant's contention is that only by substituting for this the concept of an *object* in general can we justify *a priori* knowledge.

⁵ Compare *Metaphysik d. Sitten*, Einl. III (VI 218 n.). I do not think this implies that each category is valid of some objects but not of others. Kant sometimes speaks of 'the concept of an object

into the forms of judgement. These concepts of objects in general, or of an object in general, are the categories.

If the concept of an object in general is necessary for experience, and if this concept differentiates itself *a priori* into the categories, then clearly the objective validity of the categories is established; for through them alone is experience of objects possible. Every object, to be an object of experience must be thought, not only by means of empirical concepts, but by means of the categories.

The categories render experience possible, only in so far as *the form of thought*¹—not in so far as the given matter or the form of intuition—is concerned.

The categories, on this view, make the object possible in the sense that they make it possible for us to have experience, or knowledge, of the object as an object. *We* must think the object by means of the categories, if it is to be known. Hence *our* thinking imposes upon the object certain categorial characteristics, and the object as an object known to us *must* have these characteristics. It is therefore possible for us to have *a priori* knowledge of objects by means of the categories; and just because thinking imposes these characteristics upon objects, the objects known are not things as they are in themselves, but are things as they must appear² to human minds, which

in general' or 'the concept of something in general' (*etwas überhaupt*) as the ultimate concept which is articulated in the categories. But the categories themselves are referred to indifferently as 'concepts of objects in general' or 'concepts of an object in general'; see, for example, B 128. Similarly there is no difference between 'the concept of spaces in general' and 'the concept of space in general'; see A 25 = B 39.

¹ A 93 = B 126. By referring to the form of thought, Kant reminds us, but somewhat late and not too clearly, of the argument in the Metaphysical Deduction. The form of thought is also called the intellectual form of all knowledge of an object (see A 129). It differentiates itself into the forms or conditions of thought (see A 94 = B 126).

² We are now concerned with the object, not as it would appear to sense in abstraction from thought (as we were in the previous chapter), but as it must appear to both sense and thought. Compare Chapter II § 2.

can know objects only by a combination of sense and thought.¹

§ 8. *The Principle of Transcendental Deduction in General*

The basic contention of this argument—that necessary and universal characteristics of objects, if they are to be known as necessary and universal, must be due to the nature of the mind which knows—is the fundamental doctrine of the whole Critical Philosophy and the ground of the Copernican revolution. We have met it already in connexion with space and time; and it is here emphasised at the beginning of the Transcendental Deduction, as it is reiterated at the end, both in the first² and in the second³ edition.

Kant makes the general character of his argument perfectly clear. The transcendental deduction of all *a priori* concepts—whether they are pure intuitions, like space and time, or pure concepts of understanding, like the categories—rests on one principle, and on one principle alone: that they must be known as *a priori* conditions of the possibility of experience. If they are pure intuitions, they must be known as conditions (or forms) of the intuition to be found in experience; and if they are pure concepts, they must be known similarly as conditions (or forms) of the thought to be found in experience. One or other⁴ of these they must be, and there is no justification of *a priori* concepts on any other ground.

§ 9. *The Method of the Subjective Deduction*

So far Kant has dealt only with the objective side of the Transcendental Deduction, and he has informed us⁵ that the

¹ We have so far the first part of Kant's answer to the question 'How can the categories of the understanding apply to an object given to intuition which is independent of thought?' His first answer is *that* they must apply, if any object is to be known. The explanation of *how* they can, and must, apply is to be found in the subjective side of the Transcendental Deduction together with the chapters on the Schematism and the Principles of the Understanding.

² A 128-9.

³ B 166-7.

⁴ A 94 = B 126. Compare A 111.

⁵ A XVII.

argument¹—unduly condensed as it is—is by itself sufficient as an objective deduction. Since the Transcendental Deduction has also a subjective side, it is only proper, in a general introduction of this kind, that he should refer to it; and this he duly proceeds to do.²

He does so in a short paragraph³ which looks back to A 77-9 = B 103-4, and forward to A 97 and A 115-16. This paragraph is omitted in the second edition, and three other paragraphs are substituted as a more suitable introduction to the new version.⁴

There are three original (or underivative) capacities or powers⁵ of the soul which are to be regarded as sources of knowledge.⁶ These contain in themselves what we are looking for, namely, the conditions of the possibility of all experience. Their names are *sense*, *imagination*, and *apperception*. This is

¹ A 92-3 = B 124-6.

² A 94-5.

³ For no other reason than that it deals with the Subjective Deduction this passage is regarded as late by Vaihinger and Kemp Smith. As against this view the continuity of Kant's thought should be noted. The Transcendental Deduction of all *a priori* concepts (including space and time) must show that they are conditions of the possibility of experience. A transcendental deduction can, as we know, do so only by finding their *origin* in the mind and its powers. But there are three such powers, and each of these must be investigated. The three powers are sense, imagination, and apperception. Sense has been treated in the Aesthetic; it remains for us to treat the other two.

The reason why imagination must be treated (as well as apperception or understanding) is that imagination is the power which overcomes the heterogeneity, already noted, in the concepts of the understanding and the intuitions to which they are supposed to apply.

⁴ It is in the third of these paragraphs (B 128-9) that Kant gives us a definition of category which connects it clearly with the form of judgement, and which ought to have been given in the Metaphysical Deduction itself. The first two paragraphs give an interesting criticism of Locke and Hume.

⁵ Strictly speaking, a capacity (*Fähigkeit*) is passive, and a power (*Vermögen*) is active. Sense is a capacity, imagination and understanding are powers.

⁶ They are called 'sources' here, and 'sources of knowledge' in A 97. Strictly speaking, they are sources only of elements in knowledge. To speak of a power as a *source* of elements in knowledge is to say that these elements of knowledge have their *origin* in this power.

our first introduction to apperception in the first edition,¹ and we might reasonably have expected understanding as in the previous passage.² Apperception as a power seems to be identical with thought or understanding, but there is always implied in the use of this word a suggestion that thought or understanding is in some degree self-conscious.

These three powers—if this word may be used to cover both capacities and powers—have an empirical and a transcendental use.³ In their empirical use they are concerned with the given matter of empirical ideas; in their transcendental use they are the source of *a priori* ideas, and are concerned only with the *form*, and not with the matter, of knowledge. The transcendental use of sense was considered in the Aesthetic, where we found that our sensibility was the source of space and time, the *forms* of intuition.⁴ We have now to consider the transcendental use of imagination and apperception, and to find in them the sources of the schematised and pure categories, the latter being *forms* of thought (as determining given intuitions).

Kant mentions what is contributed to knowledge by these three powers in their transcendental use.⁵ We have three things grounded upon them: (1) the synopsis of the *a priori* manifold⁶ through sense; (2) the synthesis of this *a priori* manifold through imagination; and (3) the unity of this synthesis through original apperception.

¹ In the second edition it is mentioned in B 68.

² A 78 = B 103. It must, however, be remembered that 'apperception' was a word more familiar to Kant's readers than it is to us.

³ The transcendental use of *powers* is here their use as sources of the conditions of experience—not their use beyond the limits of experience. See Chapter XI § 4.

⁴ The empirical use of sense is the reception of given sensa.

⁵ Kant does not here state the obvious fact that in the empirical use of these powers the given manifold and the synthesis would be empirical; compare A 77 = B 103.

⁶ Vaihinger (*Die Transcendentale Deduktion*, pp. 60–1 = 38–9) seems to hold that in this passage sense gives us an *a priori* synopsis of an empirical manifold. By this means he contrives to make A 94 inconsistent with § 10. He is followed by Kemp Smith, *Commentary*, p. 226. This interpretation seems to me not only superfluous but impossible.

This doctrine is the same doctrine as in § 10, for in addition to the *a priori* manifold and the pure synthesis mentioned there,¹ it was pointed out that the unity of the pure synthesis was due to the concepts which rest on the understanding; or in other words which have their origin in original apperception.²

The word 'synopsis' is applied to sense, because there is always in intuition, whether empirical or pure, a manifoldness.³ The word 'synthesis' would be inappropriate in connexion with sense, because synthesis involves an active uniting of the manifold, while sense is passive and does not unite its manifold.

Kant does not take enough trouble to make his terminology uniform,⁴ and this leads his critics to attribute to him inconsistencies in doctrine which are the product of their own excessive attention to his words, and their failure to penetrate to the meaning behind the words.⁵ Kant nowhere recognises original sources of knowledge other than sense, imagination, and understanding or apperception; and he nowhere supposes that the pure or transcendental synthesis can take place except through the medium of a pure manifold.⁶

¹ A 78-9 = B 104.

² See Chapter XIII § 7.

³ A 97. Kant's use of this term, I think, supports the view that he did not accept the psychological atomism of Hume; compare Chapter VI § 8.

⁴ It may be observed that even Plato, superior as he is to Kant both in elegance and in accuracy of style, is inconsistent in his terminology in connexion with the Line and the Cave in the *Republic*.

⁵ In some cases Vaihinger forces inconsistencies on Kant by failing to see even the plain meaning of his words.

⁶ The pure category, it is true, is the concept of the synthesis of a manifold in general (without reference to the pure manifold of time). But this concept has no validity except as schematised with reference to the manifold of time.

CHAPTER XVIII

THE PROVISIONAL EXPOSITION

§ 1. *The Method of Exposition*

Kant is conscious that the elaborateness and intricacy of the Transcendental Deduction will be a source of difficulty to the reader. For this reason he gives us first of all a provisional or preparatory exposition.¹ He hopes to simplify the final exposition by working out some of the details beforehand. Perhaps he thought that the reader should be introduced by stages to the most revolutionary part of his theory.

Such a method of exposition has, I think, something to recommend it in principle, but its application in detail suffers from serious defects.

Kant himself suggests that the provisional exposition by itself will be obscure, and will become clear only when we have mastered the final or authoritative exposition in Section 3. He even warns us that the provisional exposition is to prepare rather than to instruct us; it deals in abstraction and in isolation with questions whose systematic treatment is reserved till later.²

This warning must be taken seriously, if we are to understand the argument. We must not suppose that because Kant treats in isolation the three factors in synthesis, he has therefore introduced a new doctrine that there are three syntheses instead of one. Still less must we suppose that because he first discusses what is meant by an 'object', and reserves till later the justification of the categories, the account of the 'object' must therefore have been written at a time when he did not know what categories were.

It is more difficult to be sure whether Kant's warning means that some of the doctrines set forth in the provisional exposition are not to be taken as his true view, but are intended only to lead the reader towards the truth. The doctrine of

¹ A 98.

² A 98, A 115.

imagination differs in the two expositions, and I believe that Kant may have intended to suggest that where the two expositions differ, it is the final exposition whose doctrine is to be accepted.

This is, however, a source of real difficulty. We are expected to fill up the details of the final exposition from the provisional one; but how can we do so with confidence, if the provisional exposition is not in all respects reliable? Nevertheless it is impossible to avoid doing so, for in certain respects the earlier discussion, as Kant himself suggests, is more adequate and detailed than the later.

In this matter we must do the best we can, but it is not surprising that in view of the real defects in his method of exposition, Kant has substituted a clearer and better statement in the second edition.

§ 2. *Repetitions*

The method adopted by Kant is bound to lead to a great deal of repetition, and these repetitions are increased by his habit of beginning new sections with a little introduction and finishing them with a review or summary of what has gone before. From the accounts given of his method in lecturing,¹ it looks as if a practice which is useful in expounding difficult subjects, especially to beginners, had become somewhat exaggerated, and perhaps almost mechanical, with the advance of years.

Kant's habit of repetition, and indeed the mere fact that, apart altogether from introductions and summaries, there are two expositions in the first edition, and another one in the second, makes the task of expounding the Transcendental Deduction peculiarly difficult. For good or for evil I have set out, not merely to state what I believe Kant's doctrine to be, but also to show, in the face of modern criticism, that his argument is an argument, and not a collection of contradictions.

¹ See the account given by Jachmann, quoted by Caird, *The Critical Philosophy of Kant*, Vol. I, p. 64.

In such a task I cannot avoid repetition. I can only hope to reduce it to the necessary minimum, and I will try to keep the lines of the argument as clear as possible by relegating to footnotes discussion of the many obscurities which we are bound to meet.¹

§ 3. *The Objective Deduction*

True to his method, Kant begins the provisional exposition with a new introduction, which sums up his previous argument and describes the Transcendental Deduction, firstly on its objective, and secondly on its subjective, side.

On the objective side we learn little more than we know already. The categories contain *a priori* the pure thought² involved in every experience, and in order to show their objective validity we have to prove that through them alone can an object be thought.³

This contention is supported by considerations with which we are now familiar. Concepts have no content⁴ apart from intuitions, by which alone objects can be given to us. Intuition in general constitutes the field, or the total given object, of possible experience. Hence an *a priori* concept must be related to possible experience, if it is to be the thought of an object and not a mere empty form which thinks nothing.⁵

If the categories are *a priori* concepts, they cannot contain anything empirical, or in other words they cannot be derived from empirical intuition. They must none the less, if they have objective validity, be related to possible experience; and this they can be, only if they are *a priori* conditions of

¹ As I have now indicated the broad lines of Kant's argument in the Transcendental Deduction, the reader who wishes to discover how the general theory works out may prefer to go straight on to Chapter XXX.

² Kant might also have said 'the form of thought'; compare Chapter XI § 2. ³ A 96-7.

⁴ They could have the form of thought as their content, but Kant regards this form as empty. A concept of this kind would be 'the logical form of a concept', rather than a concept which thinks any object. ⁵ A 95.

such a possible experience. Hence we have to enquire what are the *a priori* conditions on which experience rests (so far as the thought involved in experience is concerned); and the concept which expresses these conditions¹ adequately and universally² will be the pure concept of the understanding which we seek. These pure concepts of the understanding must contain³ pure *a priori* conditions, both of experience, and of its *object*.⁴ Otherwise not only would they be thoughts of nothing; they would not arise, even in thought, apart from the given data of experience.⁵

Kant makes one new point. Although the categories must have this relation to experience if they are to be thoughts of an object, and even if they are to arise in thought, nevertheless, once I possess the categories, I can invent concepts of objects which are either impossible in themselves or incapable of being given in any experience.

For example, I can invent the concept of spirit or soul, that is, the concept of an immaterial substance possessed of reason;⁶ I do so, however, by leaving out something which

¹ These conditions are 'formal', concerned with form not with matter; and they are 'objective', that is, they are universal and necessary conditions of objects being known—a subjective condition would, I take it, be peculiar to an individual or a set of individuals. These objective conditions have their origin in subjective capacities or powers, and such capacities or powers are therefore, in the last resort, conditions of objects being known; but Kant would not call these capacities or powers 'objective', presumably because they belong to the mind and not to the object. This suggests that objective conditions must be elements in the character of the object itself, as well as conditions of its being known.

² This seems to me to imply that the categories are conditions of all experience and not merely of some.

³ A 96. Kant says indifferently that the categories 'are' or 'express' or 'contain' the conditions of experience.

⁴ A 96. Compare A 111: 'The *a priori* conditions of a possible experience are also conditions of the possibility of objects of experience'.

⁵ I take it that when Kant speaks of 'the elements of all *a priori* cognitions', he has in mind the categories, which are correctly so described.

⁶ See *Träume eines Geistersehers*, 1. Teil, 1. Haupts. (II 321) and also the Paralogisms.

is a necessary condition of possible experience. Kant does not tell us what is left out. I take it to be 'the permanent' which is given in intuition. This we can find only in outer intuition, and so only in material substances; and it is necessary, if the category of substance is to have validity.

I can invent also the concept of God, and this I do by extending the categories beyond the limits of experience. Again Kant gives us no details of this process; but it obviously takes place when we say that God must be the First Cause, or that He must be the *ens realissimum*.

Possibilities of this kind are no argument against the view that the categories must contain the conditions of experience and must be justified because through them alone can an object of experience be thought.

§ 4. *The Subjective Deduction*

The contention that the categories must have objective validity since only by means of them can an object of experience be thought is the central argument of the Objective Deduction.¹ But such a thought of objects, if it is objectively valid, is *knowledge*, and indeed *a priori* knowledge; and in this knowledge more must be at work than understanding considered merely as a power of *thinking*.² Understanding, so far as it has a relation to objects, is a power, not merely of thinking, but of knowing; and we must explain how it can have this relation to objects, or in other words how it can be a power of *a priori* knowledge.³ This explanation is the task of the Subjective Deduction.

Understanding, as a power of knowing, requires the co-operation of sense and imagination, and we have to investigate the possibility of pure understanding (as a power of *a priori* knowledge) and of the powers of cognition on which it rests.⁴

¹ A 96-7.

² A 97. For the distinction between thinking and knowing see Chapter II § 4.

³ On Kant's view, if it were not a power of *a priori* knowledge, it could not be a power of knowledge at all.

⁴ A XVI-XVII. When Kant says this investigation is concerned with the question 'How is the *power of thinking* itself possible?', he ought

We have therefore to consider the subjective sources of cognition which form the *a priori* foundation of the possibility of experience. These sources we already know to be sense, imagination, and understanding (or apperception)—the last, apart from sense and imagination, being a power of thinking, not of knowing. Since we are concerned with them as giving us (in conjunction) *a priori* knowledge, we are naturally concerned not with their empirical, but with their transcendental, character.¹

§ 5. *The Threefold Synthesis*

We are already aware that for knowledge we must have three things: (1) a given sensuous manifold, which may be empirical or pure; (2) a synthesis of imagination; and (3) a bringing of the synthesis to concepts by understanding.² We are also aware that for *a priori* knowledge the manifold must be pure, and that the synthesis of this manifold receives its unity from pure concepts which have their origin in apperception.³ Furthermore these pure concepts are concepts of pure synthesis;⁴ and they receive their stuff from space and time, which contain a pure manifold and also are forms of the empirical intuitions through which alone an object can be given.⁵ This implies that every empirical synthesis is conditioned by a pure synthesis.

Kant proceeds to state his theory again; but as he has just referred to the fact that sense, imagination, and understanding

to say rather 'How can the power of thinking give us *a priori* knowledge?' See also Chapter XI § 11.

Note also that in A 97, when Kant says that the three subjective sources of cognition—which must be sense, imagination, and understanding (as a power of thinking)—make understanding itself possible, he must mean that they make understanding possible as a power of *knowing*.

¹ Compare A 78-9 = B 104, A 94, and Chapter XVII § 9. They have a transcendental character—called in A 94 a transcendental 'use'—as sources of *a priori* ideas; compare Chapter XI §§ 3-4.

² A 77-8 = B 103.

³ A 78-9 = B 104 and A 94; see Chapter XVII § 9.

⁴ A 78 = B 104; compare A 79 = B 104.

⁵ A 77 = B 102.

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have both an empirical and a transcendental character, he does not think it necessary to repeat this. Furthermore he makes certain additions, and he also introduces needless variations in terminology. With this help Vaihinger is able to argue that the doctrine here is entirely different from that found elsewhere. I venture to maintain that the differences are more in the expression than in the thought.

Ideas require to be combined, if we are to have anything that can be called knowledge.¹ Consequently sense by itself is not enough for knowledge: sense may be said to have a passive synopsis,² because it contains a manifold; but it does not unite or combine the given manifold, and therefore we require in addition an active *synthesis* in order to do so.³

This synthesis is a threefold synthesis necessarily present in all knowledge: (1) a synthesis of the *apprehension* of ideas, as modifications of the mind in intuition; (2) a synthesis of the *reproduction* of ideas in imagination; and (3) a synthesis of their *recognition* in the concept.

These three syntheses point to three subjective sources of knowledge which make possible understanding (as a power of *knowledge*) and experience itself (as an empirical product of understanding). No reasonable man can doubt that these three subjective sources of knowledge are sense, imagination, and understanding (as a power of thought).⁴

It will be made sufficiently clear later that the three syntheses are aspects of one synthesis,⁵ and that each of them is pure as well as empirical. The new doctrines expressed are that the synthesis of imagination, even when it is pure or transcendental, is a synthesis of *reproduction* (a doctrine peculiar to the pro-

¹ A 97. Compare A 77 = B 102.

² Compare A 94.

³ Given appearances or isolated *sensa* must be combined into an object, such as a chair. This is a common-sense view quite distinct from the atomism of Hume.

⁴ Compare A 115. The synthesis of apprehension, although it is the work of imagination, points to sense as a source of knowledge because it is a 'taking up' of what is given to sense.

⁵ Even here they have just been called 'a threefold synthesis'.

visional exposition); and—what is more troublesome—that there are four factors at work (one synopsis and three syntheses) instead of the three factors which were described before.

Nevertheless the fact that there are still only three subjective sources of knowledge shows that Kant does not intend any serious departure from his usual doctrine. The synthesis of imagination, which was described before,¹ is here analysed into (1) a synthesis of apprehension and (2) a synthesis of reproduction. There is only one synthesis of imagination in which both apprehension and reproduction play their part.²

The synthesis of apprehension certainly cannot be ascribed to sense, and must be ascribed to imagination, since all synthesis is active. Its character is made clear in A 120-1. Imagination must apprehend the impressions of sense, that is, it must take them up³ into its own activity.⁴ Apprehension is, however, closely connected with intuition, since it is an act exercised immediately or directly on intuition or sense-perception.⁵

This unnecessary complication comes from speaking of powers or faculties—a form of speech which it is easier to condemn than to avoid. It would be simpler to say that the mind (1) apprehends the given manifold of sense, (2) reproduces it in imagination, and (3) recognises or judges it by means of the concept. These three acts are necessary for knowledge of an object.

One further addition made by Kant should be noted. Apprehension is apprehension of ideas 'as modifications of the mind in intuition'. This implies that what it takes up

¹ A 77-9 = B 103-4; A 94.

² 'The synthesis of apprehension is inseparably bound up with the synthesis of reproduction'; see A 102.

³ 'aufnehmen.' Compare A 77 = B 102.

⁴ See also A 99 and A 102, and compare B 162 n.

⁵ A 120. See also A 99. In other places it is said to make intuition into sense-perception, and even itself to be sense-perception. For the connexion of imagination and sensibility see B 151.

belongs to inner sense, and so is subject to the form of time.¹ The consideration of this point must be postponed.²

§ 6. *Plan of the Argument*

The argument is expounded in four 'numbers', which we may call subsections. These are as follows:

- (1) The synthesis of apprehension in intuition.
- (2) The synthesis of reproduction in imagination.
- (3) The synthesis of recognition in the concept.
- (4) The provisional explanation of the possibility of the categories, as *a priori* cognitions.

It will be observed that there is no mention of the categories till we come to subsection 4. It will also be observed that the first three subsections seem to be concerned with the subjective side, and the fourth subsection with the objective side, of the Deduction. As a matter of fact, the objective side of the Deduction is found in the second part of subsection 3 as well as in subsection 4. This distinction is, as usual, the main reason why the latter half of the exposition is regarded by Vaihinger as earlier in origin than the beginning.

¹ Hitherto no stress has been laid on time as opposed to space; see A 55 = B 79, A 77 = B 102, A 78 = B 104, A 85 = B 118, etc. The use of the singular 'condition' (*Bedingung*) in A 93 = B 125 seems to have no special significance, and I have presumed in Chapter XVII § 4 that Kant was referring both to time and space.

² See Chapter XIX § 2.

CHAPTER XIX

THE THREEFOLD SYNTHESIS

§ 1. *The Importance of Time*

✓ The Transcendental Deduction is possible only because time is the form of inner sense. This is emphasised by Kant at the very beginning of his exposition;¹ and his emphasis is the more necessary, because time tends to fall into the background as the argument proceeds.

Our ideas, as we have seen, are of various kinds. Some are empirical and some are pure; some are due to the influence of outer things,² while others are due to the working of our own minds.³ However they originate, they are all, in one aspect of them, modifications of our mind; as such they belong to inner sense, and are necessarily subject to time, the form of inner sense. It is this fact alone which enables us to have *a priori* knowledge of all objects of experience.⁴

✓ If an object of experience is to be known, it must be given in sensuous intuition. Kant believes that every intuition contains in itself a manifold or a manifoldness,⁵ but he does not believe that this manifold can be 'represented' as a manifold by means of mere sense. If we are to be aware of a manifold as a manifold, we must be aware both of its unity and of its multiplicity; and for this purpose the mind must be active as well as passive.

¹ A 99.

² These things may be taken either as things-in-themselves or as physical bodies.

³ Ideas due to the working of our minds are probably ideas of states of the self; compare B 156. Concepts (as regards their form) and ideas of imagination might possibly be described as due to the working of the mind; and so too might all *a priori* ideas, if 'working' could cover passive sense as well as active thought.

⁴ Compare A 55 = B 79-80, A 76-7 = B 102, A 138-9 = B 177-8; also Chapter VII § 2.

⁵ A 97. Compare B 140.

The manifold must be 'run through' and 'held together', and not merely received passively by sense.¹

One of the main reasons for this necessity is that it takes time to apprehend a manifold as a manifold. Kant puts this obscurely by saying that the mind must distinguish the time in the succession of impressions,² since each idea, *as contained in one moment*, cannot be anything but absolute unity.³

Kant is clearly mistaken, if he means that at every moment we are given a single undifferentiated sense-impression, and that we go on to join up undifferentiated atomic sense-impressions into an intuition containing a manifold.⁴ His view is more plausible, if we take it as expressing a limit reached by analysis. Let us suppose him to mean that if we were to abstract from the time-element in our consciousness, and ignore the continuous successive synthesis by which we hold together what is given at different times and in different places, we should be left with something which has no parts outside one another, or before and after one another.⁵

For the present we must pass over the difficulties of this doctrine. It is, however, obvious that we cannot be aware of an intuition as lasting through time—and all intuitions last through some time—without holding together before the mind what is given at different times. This need not commit us to the view that in any moment, taken apart from what comes before it, we can be aware of a sense-impression which is an

¹ Kant says: '*so ist erstlich das Durchlaufen der Mannigfaltigkeit und dann die Zusammennehmung desselben notwendig*'. The use of '*desselben*' instead of '*derselben*' is presumably due to the influence of the words '*aus diesem Mannigfaltigen*' at the beginning of the sentence.

² I do not know what this means, unless it means that the mind must know as parts of a succession the different times in which impressions are given. Compare A 167 = B 209.

³ A 99. Compare B 154, B 202, A 167 = B 209, B 218, A 192 = B 237. See also Chapter XXXVIII § 1.

⁴ On this view his ascription of 'synopsis' to sense would be meaningless, and the first results of synthesis would not be 'confused'; see A 94, A 97, and A 77 = B 103.

⁵ See especially A 167 = B 209 and note that even then there is, according to A 168 = B 210, a kind of multiplicity present. Compare also Chapters VI § 8 and XLII § 1.

undifferentiated unity.¹ There can be no idea in an isolated point of time any more than there can be a colour in an isolated point of space. The fact that we can discuss these as abstractions does not mean that they are given elements out of which our experience is constructed. They are, at most, elements into which our experience can be analysed.

§ 2. *The Synthesis of Apprehension*

The synthesis by which we run through the manifold and hold it together in unity is called the synthesis of apprehension.

The synthesis of apprehension, unlike the synthesis of reproduction, is exercised directly² on sense-impressions or *sensa*.³ It involves a 'taking up'⁴ of given⁵ sense-impressions into empirical consciousness. Through apprehension of given sense-impressions we acquire sense-perception.⁶

The synthesis of apprehension involves more than a mere momentary taking up of sense-impressions. It holds the manifold of intuition together in unity.⁷ Passive sensibility, although it can be said to offer or present a manifold,⁸ cannot produce⁹ it *as a manifold*, that is, as contained in one idea, without the help of an active synthesis.

Kant adds that this synthesis of apprehension must also

¹ Compare A 191-2 = B 236-7.

² A 99, '*geradezu*.' This corresponds to 'immediately' (*unmittelbar*) in A 120, and ought to be translated.

³ In A 99 Kant says 'on intuition', and in A 120 he says 'on sense-perceptions', but he means the given manifold, that is, *sensa* or sense-impressions.

⁴ '*aufnehmen*.' See A 120, B 153, B 202, and A 190 = B 235.

⁵ See A 201 = B 246.

⁶ '*Wahrnehmung*.' See B 162. Kant, like Leibniz, believed that sensations need not be conscious, but that apprehension and sense-perception always are conscious. Compare A 120, B 160, B 207, and *Anthr.* §§ 5 and 9 (VII 135 and 144); also the curious doctrine about sounds and colours in *K.d.U.* §§ 14 and 51 (V 224 and 324).

⁷ In *K.d.U.* § 26 (V 251) Kant distinguishes the 'taking up' (*Auffassung* or *apprehensio*) from the 'holding together' (*Zusammenfassung* or *comprehensio*); but the synthesis of apprehension, and even apprehension itself, is commonly used to cover both.

⁸ '*darbietet*.'

⁹ '*bewirken*.'

be exercised *a priori*, that is, it must be exercised on the pure manifold of space and time, which has its origin in our sensibility.¹ He may mean, not only that a pure synthesis of apprehension is necessary for knowledge of space and time, but also that such a pure synthesis of apprehension is present in every empirical synthesis of apprehension as its condition. The latter point is in any case made clear later;² and it is obvious from what he has already said, namely, that all our ideas are in time as the form of inner sense.

In the second edition,³ as indeed even in the first,⁴ Kant defines the synthesis of apprehension as if it were empirical only. This is one of his many variations in terminology which do not indicate a real difference in doctrine. Kant never ceases to hold that the empirical synthesis of apprehension is conditioned by a pure synthesis of the manifold of time.⁵

The full description⁶ of the synthesis of apprehension is 'the synthesis of the apprehension of ideas, *as modifications of the mind in intuition*'. This shows that apprehension *quod* apprehension is concerned with ideas as these are present to us in inner sense.⁷ These ideas may be called subjective in the sense that for mere apprehension (that is, for apprehension considered in abstraction from thought) they are not ideas of an object. They would be described more accurately, if they were said to be neither subjective nor objective, since for mere apprehension they are certainly not modifications of a subject which is distinguished from objects.⁸ It is through

¹ According to B 160-1 n. it is through this synthesis that the manifold of space (and time) receives that unity which is necessary if we are to have a pure intuition and not merely a form of intuition.

² The synthesis of apprehension is the transcendental ground of the possibility of all knowledge, not only empirical, but also pure; A 102. Compare also B 160-1. ³ B 160.

⁴ A 120. Compare A 108.

⁵ See, for example, B 160-1 and A 165-6 = B 206. ⁶ A 97.

⁷ This is confirmed by A 98-9 and by A 101, and also, I think, by the reference to empirical apprehension in A 115.

⁸ As apprehended, ideas are modifications of the mind or events in a mental history. We do not, however, know them to be such except by inner sense and reflexion.

thought, and not through mere apprehension, that they are recognised to be ideas of an object; and it is only when they are recognised to be ideas of an object that they are recognised to be themselves modifications of the mind. Knowledge of an object and knowledge of a subject are for Kant correlative terms, so that one always implies the other.

Kant is not maintaining that ideas are first of all apprehended, and then referred to an object by thought. He is, on the contrary, analysing our ordinary experience of objects; and his doctrine is that when we are seeing, for example, a red box, we must be taking up and synthetising given *sensa* by means of imagination. This activity is a necessary element in our experience, and must be distinguished from the thought which is also a necessary element in the same experience.

The synthesis of apprehension is closely connected,¹ or even identified,² with sense-perception,³ and therefore involves sensation⁴ (which presupposes the actual presence of the object⁵). Nevertheless the synthesis of apprehension seems to give us more than a mere *sensum*.⁶ In the above example it not only unifies the red colour, but combines it in imagination with other *sensa*, and so gives us the intuition or image of

¹ B 162.

² A 192 = B 237; compare A 119-20.

³ '*Wahrnehmung*.'

⁴ B 207, '*Empfindung*.'

⁵ A 50 = B 74. The object may be taken here on a common-sense level; but I think Kant would defend this statement both as regards the phenomenal object and also as regards the thing-in-itself (in accordance with his doctrine of double affection). The 'presence' attributed to the thing-in-itself does not imply that it is present in a point of space at a point of time, but only that it is the unknown reality which appears. Imagination when not manifested in apprehension does not involve the presence either of a phenomenal object or of a thing-in-itself; compare B 151 and A 100.

Something similar to apprehension must be present in dreams and in fancy, but Kant seems to use 'apprehension' technically for apprehension of a real object. Apprehension is thus essentially an element in experience, though it must be supplemented by thought to give us knowledge of objects. Compare A 201 = B 246.

⁶ I am taking a *sensum* here to be, for example, a colour or a sound, and not merely the non-spatial and non-temporal elements into which, according to some interpretations, Kant believed a colour or a sound could be analysed.

a box.¹ If this interpretation is correct, the synthesis of apprehension is the name for the whole synthesis of imagination, whereby we take up given *sensa* and combine them into objects² in space and time. This synthesis involves, as we shall see, a synthesis of reproduction; and so far as we know that the combined *sensa* constitute a real object, and not a product of mere fancy, there must also be present a synthesis of recognition.³

One other point must be added. It is sometimes held that Kant makes a mistake in regarding sense as passive. I do not believe that this can be properly called a mistake, unless by those who maintain that there is no passive element in sense

¹ Compare B 162 where we apprehend a house, and also the freezing of water.

² Apart from the difficulty of being sure about what Kant meant, it is far from easy to find an unambiguous terminology for the expression of his meaning. The synthesis of apprehension seems to give us, not only colours, sounds, and so on, as individual wholes, but also complete visual and tactual 'images'—compare A 120 n.—in three-dimensional space. Such an image apart from thought would be indistinguishable from the similar images or apparitions in fancy and in dreams, and could not be known as a real object. Nevertheless the complex image apprehended in sense-perception is not an image of the real object (except in so far as it is the appearance of an unknown thing-in-itself); it is the real (phenomenal) object, which, however, is known to be so only because thought is present in the experience as well as sense and imagination. We are entitled to call it an 'image' only by an act of reflective abstraction which separates apprehension from thought. The realist would call it simply a 'thing'.

Kant's doctrine would have been clearer, if he had used, say, '*sensum*' for a colour or sound, '*impression*' for the manifold elements into which it can be analysed, and '*appearance*' or '*intuition*' or '*image*' for that combined whole of *sensa* which by thought we recognise to constitute an object of experience and which, in abstraction from thought, might be called an indeterminate object. We ought to have other words for an imaginary object (or '*apparition*') and for the similar elements to be found within it. Perhaps we ought also to have neutral words for the case where the distinction between real and imaginary objects is not made. Kant leaves us to guess his precise meaning from the context, and this is not always easy.

³ By the synthesis of recognition we judge the combined colours and sounds and so on to be accidents of a permanent substance in a common space and time.

at all. If we consider sense-perception in abstraction from thought, Kant holds that on analysis it is found to contain both a passive and an active element. To be aware even of a colour we require not only passive sense, but an active taking up, running through, and holding together of what is passively received. This activity of imagination is, as he says, a necessary ingredient in sense-perception;¹ and I cannot see that we ought to recognise any further element of activity in sense-perception—at any rate not on the level of common sense or even of science.

§ 3. *The Synthesis of Reproduction*

Apprehension involves more than 'taking up' the given at the moment when it is given. Since our awareness of a colour, and still more our awareness of a concrete object, is a process which occupies time,² we must, if we are to have experience of objects, be able to keep before our minds what has been given, when it is no longer being given. This is the work of memory, without which there could be no knowledge. Memory, however, involves thought or judgement, and this is reserved for subsection 3. The first thing that is necessary—and this is still commonly believed to be a necessary element in memory—is a power of reproducing past ideas in imagination, which Kant regards primarily as the faculty of representing an object even when that object is not present to us in intuition.³

If we are to be aware of intuitions (and still more of objects) lasting through time, we must have reproduction of past ideas. The synthesis of apprehension is inseparably connected with the synthesis of reproduction.⁴ It would, I think, be a clearer statement of Kant's doctrine, if we said, not that there are two

¹ A 120 n.

² Compare *Metaphysik*, pp. 55-6; and also A 103.

³ B 151. Compare A 100. This perhaps could be stated more clearly by omitting reference to the ambiguous 'object'. Imagination reproduces intuitions which are no longer given in sensation.

⁴ A 102.

inseparable syntheses, but that the synthesis of apprehension includes reproduction as a necessary element within itself.

Now awareness of pure intuitions (time and space) is also a process that takes time. If I am to be aware of a number of units,¹ I must not only be aware of each unit; I must keep them in mind, or reproduce them, as I go on to the other units. Apart from such reproduction I could never be aware of a total that I had counted; and indeed I could never be aware of space and time, for they also are made up of parts which I must know one after another.

The pure synthesis of the apprehension of time is the necessary condition of all knowledge (whether empirical or pure), since all ideas are given to us in time. Hence the pure² synthesis of the reproduction of time (as inseparably connected with the synthesis of apprehension) is also a necessary condition of all knowledge. The pure synthesis of reproduction and the pure synthesis of apprehension alike belong to the transcendental³ acts of the mind; and we are entitled to speak of the transcendental power of imagination, since imagination is the power which performs these acts. The transcendental synthesis of imagination is a necessary condition of every empirical synthesis.

In its essentials this doctrine is present everywhere in the *Kritik*, but with one important modification. Elsewhere, both in the first and in the second edition, the transcendental synthesis of imagination is not reproductive but productive.⁴

It is this striking fact which (along with some others of less importance) inclines me to the belief that the provisional exposition may represent an earlier⁵ level of reflexion, and

¹ Other examples Kant gives are the parts of a line, and the divisions of time between one noon and another.

² Kant does not say expressly here that this synthesis is pure (though this should be obvious from the context); but he does speak of this synthesis as a pure transcendental synthesis in A 101.

³ Transcendental acts are those which are sources of *a priori* knowledge and conditions of all experience. ⁴ A 118; A 123; B 152.

⁵ Vaihinger's view (that Kant regarded the transcendental synthesis of imagination first as productive, and then as reproductive, and finally again as productive) seems to me to have nothing to recommend it.

perhaps gives us the line of thought by which Kant progressed to his conclusions. He himself tells us that imagination was commonly regarded as reproductive,¹ and this part of the Deduction seems to me to have taken its start from the *Metaphysica* of Baumgarten.² While it is barely conceivable that Kant introduced this view into the provisional exposition in order to conform more closely to the probable views of his readers, it is much more likely that he made use of it because it was a view which he had at one time held, and which he had perhaps already written in this form.³

The two doctrines of imagination (as reproductive and as productive) are not, however, so different as might seem at first sight. In both cases a transcendental synthesis of the pure manifold of time is the necessary condition of all knowledge.

Kant was perfectly correct in supposing that a pure reproductive synthesis was necessary for knowledge of time. There must be such a reproductive synthesis, and it must be pure, in the sense that the manifold synthetised is a pure manifold. The reproduction, however, does not depend upon the fact that the manifold of time is pure; it depends, like any other reproduction, upon the fact that we tend to reproduce in imagination what has recently been before our minds in a particular context.⁴ It requires only a step to see that the pure synthesis of time derives its transcendental importance from

¹ A 120 n.

² See *Proceedings of the Aristotelian Society*, Vol. XXX, p. 174 (1930).

H. J. de Vleeschauwer in *La déduction transcendente* has recently shown that it is even more closely connected with the psychology of Tetens. He has also, I think, proved that Kant's whole doctrine of imagination was developed in the years immediately preceding the publication of the *Kritik*.

³ This has the further advantage that, if there are any reasons for regarding the rest of the argument as early—it is certainly not pre-Critical—the provisional exposition can be treated as all of a piece, which in my opinion it undoubtedly is.

⁴ For this reason it might even be regarded as (so far) empirical. Compare A 118 'the reproductive synthesis rests on conditions of experience'.

the fact that time, like space, can be *constructed a priori*,¹ and that the reproduction involved is secondary. There is no revolution in passing from reproductive to productive (or constructive) imagination, and the second doctrine is only a more adequate expression of what was imperfectly expressed in the first.

I believe Kant's reasoning on this matter to be fundamentally sound. It may require some modification in the light of the difficult modern theory of what is called the 'specious present', but I do not think that this theory affects the soundness of his contention.²

§ 4. *Three Kinds of Imagination*

So far Kant's argument is simple, and even obvious. He is saying no more than this, that if we are to be aware of a succession of appearances (or ideas) in time, we must be able to keep before the mind both the past appearances and the past time in which they appeared.³

This is, in the first instance, the work of reproductive imagination. But imagination, according to Kant,⁴ is of three kinds. Firstly, there is *plastic imagination*, which is concerned with making images or figures *in space*;⁵ secondly, there is *associative imagination*, which connects ideas *in time*; and thirdly, there is imagination which connects ideas because of their *kinship* or *affinity*,⁶ that is, because they are derived from a common ground.⁷ This latter kind of imagination helps us to deal with a single theme, whether in silent reflexion or in conversation.

¹ For this reason pure synthesis can rest upon a ground of synthetic *a priori* unity—see A 78 = B 104—and ultimately upon the categories and the unity of apperception. Compare Chapter XIII § 6.

² See *Mind*, Vol. XXXVIII, N.S. No. 151, pp. 318 ff.

³ This requires judgement (or memory) as well as reproduction, but we are at present concerned only with reproduction.

⁴ *Anthr.* § 31 (VII 174).

⁵ When this imagination is uncontrolled it is 'phantasy' (as in dreams); when it is controlled it is 'composition' (as in the imagination of the artist). See *Anthr.* § 31 A (VII 175). ⁶ '*Verwandschaft*.'

⁷ *Anthr.* § 31 and § 31 C (VII 174 and 176).

It may be thought that the synthesis of reproduction is the work of associative imagination, which connects ideas in time. But plastic imagination seems also to be concerned, since space is involved as well as time, and the business of imagination (in apprehension and reproduction) is to make a picture or image.¹ I believe, although Kant is far from making this clear, that he has in mind all three kinds of imagination; and of the three it is the imagination determined by affinity which is the most important, for it is this kind of imagination which enables us to associate ideas because they are all ideas of one object.² As Kant himself says,³ 'The ground of the possibility of the association of ideas, *so far as it lies in the object*, is called the *affinity* of the manifold'.⁴

If we keep this fact in mind, much that seems obscure or arbitrary in Kant's doctrine will become intelligible.

§ 5. *Transcendental Affinity*

Kant complicates his exposition of the synthesis of reproduction by introducing a doctrine which we may call the

¹ A 120-1.

² Association by affinity is of course not confined to the association of the qualities of one concrete physical object. It is also present e.g. when we associate the units we have just counted with the total produced by counting.

This kind of association seems to me to be distinct from association by contiguity or similarity, and to be clearly a factor in our experience of objects. Such association, it should be noted, presupposes the concept of an object in general, and even in most cases the concept of the special kind of object known. It therefore could not mark a stage in the process from subjective sensations to knowledge of objects, but with such a process Kant is not concerned. We shall find later that the whole synthesis of apprehension is controlled by thought (as well as by what is given).

³ A 113.

⁴ It may be objected that in this passage Kant is dealing primarily with association in virtue of causal sequence, and that 'affinity' is here used in a wider sense than the restricted one considered here. Even so, I think the terms of the definition are interesting as showing some connexion between the doctrine of the *Anthropologie* and that of the *Kritik*. Moreover it must be remembered that for Kant causality itself is involved in the nature of the object as such.

doctrine of 'transcendental affinity'.¹ This doctrine shows the importance of the pure synthesis of imagination by explaining how it conditions or determines the empirical synthesis.

Every philosopher recognises, in some form, the empirical law of the association of ideas. Ideas which habitually follow, or accompany, one another² become associated, so that when one of these ideas is present, the mind commonly passes to, or reproduces, the other.³ We have thus a power of reproduction which acts according to a fixed rule.⁴

This power of reproduction would have no chance of being exercised, unless appearances were given to our senses in a regular order. The empirical synthesis of reproduction presupposes that given appearances are themselves subject to a rule or law in accordance with which they follow or accompany one another.

The examples by which Kant illustrates this point are interesting, for they suggest that he is thinking mainly about reproduction through affinity. The synthesis of reproduction would be impossible if, for example, cinnabar were now red and now black, now light and now heavy. In this case reproduction would seem to take place (as it commonly does)

¹ A 114; A 122; A 766 = B 794. The name of this doctrine is not mentioned in A 100 ff. nor in A 105-6 and A 108, where it seems to be implied.

² Kant may be thinking only of ideas which are habitually successive or contemporaneous in time, but he may also be thinking of the fact that ideas accompany one another as ideas (or appearances) of one object. This is suggested by the example of 'cinnabar'.

³ A 100. Compare *Anthr.* 31 B (VII 176). Note that imagination here (and this is the primary characteristic of imagination) can work without the presence of the object, whereas intuition—see, for example, *Prol.* § 8 (IV 281)—always involves the presence of the object. Compare also B 151 and *Anthr.* § 28 (VII 167). Kant sometimes speaks of intuition loosely, as in the passage from the *Anthropologie*, where he says that 'Imagination is a power of intuition, even without the presence of the object'. It is unfortunate that he has no special word to distinguish the ideas or images of imagination from the intuitions which contain direct sensation.

⁴ 'nach einer beständigen Regel.' It is difficult to be sure how far the rule is really 'fixed'. As usually formulated, the so-called laws of Association seem to express only a tendency.

because we believe that certain qualities or appearances belong to one object. Such association is distinct from thinking, and need not involve consciousness of the rule to which it conforms.¹

All this is reasonable enough, but it seems an immense leap when Kant goes on to say, not only that something² must make this reproduction possible, but that it must do so 'because it is the *a priori* ground of a *necessary* synthetic unity of appearances'.³

It is obvious that unless there were some regularity in given appearances, there could be no association of ideas through the frequent recurrence of similar ideas in immediate succession.⁴ It is equally obvious that any attempt to infer from this a necessary law of cause and effect governing all appearances would be as fallacious an argument as one could wish to see. A very limited degree of regularity in the succession of appearances would make association possible; and even if regularity were without exceptions in our experience, this would be far from proving that the regularity was necessary.

If Kant is thinking especially about the association of ideas through affinity, that is, through their connexion with one object, such an association could not take place unless there were objects whose given characteristics have some constancy and coherence. But here again we are not entitled to infer that

¹ *Anthr.* § 31 C (VII 177). Although not derived from understanding, it takes place in accordance with a rule of understanding; for there would be no object, unless the understanding thought that the different appearances were appearances of one object.

² A 101. This 'something' is, I think, in the first instance, the transcendental synthesis of imagination which imposes necessary synthetic unity on appearances. The ultimate ground is the unity of apperception. See A 101-2, A 105, and A 122-3.

³ This necessary synthetic unity is manifested, at least partially, in the fact that appearances accompany or follow one another in accordance with rules; see A 100.

⁴ Or simultaneously. Kant is, however, interested in immediate succession because of its connexion with causality, and he does not mention simultaneity when he formulates the law of association (in the narrow sense connected with associative imagination). *Anthr.* § 31 B (VII 176).

the coherence of these characteristics in the object is a *necessary* coherence.

These criticisms would be conclusive if we assumed the doctrines of realism. On a realistic basis the observed association of ideas will, at the most, lead us to ask *whether* we can prove that there is an *a priori* ground for that necessary synthetic unity¹ of appearances² which seems to be presupposed by such association. The proof of such a ground cannot in any case depend on the contention that without necessary synthetic unity of appearances there would be no such association of ideas as we find in experience. If we are to prove that there is a necessary synthetic unity of appearances, we must—as in the proof of any kind of necessity—show that it has its origin or *a priori* ground, in the nature of the mind. The possibility of finding such a ground rests on the doctrine which Kant conceives himself to have already established: that given appearances, or phenomena, are not things-in-themselves, but are only the play of our own ideas, and can be reduced to determinations of inner sense.³ This means that they must necessarily conform to time, as the form of inner sense.

If we can show that a pure transcendental synthesis of imagination is necessary for knowledge of time (and space),⁴ this will imply, according to Kant, not only that there must be a necessary synthetic unity of time (and space), but also that there must be a synthetic unity, or transcendental affinity, of appearances in time (and space).⁵ As I have already shown that there must be such a pure transcendental synthesis of

¹ We can describe this as 'transcendental affinity', and take it to cover both the necessary regularity and the necessary coherence of which I have spoken above.

² For the realist 'appearances' would be 'things appearing'.

³ A 101.

⁴ The presence of space in this argument as well as time is typical of Kant's argument throughout in spite of his insistence on the special importance of time.

⁵ This is what Kant claims to prove in the Principles, and especially in the Analogies, but he seems to assume it here.

imagination,¹ the argument is now complete;² but we must consider Kant's own exposition a little more closely.

§ 6. *The Pure Transcendental Synthesis of Reproduction*

The sentence in which Kant expresses the crucial stage of his argument³ is unfortunately intricate, and leaves many gaps to be filled in. I will try to deal in my own way with the elements of which it is composed. When the reader has grasped the relation of these elements to one another, he will be able to follow Kant's general meaning in spite of the awkwardness with which it is expressed.

Kant assumes that experience presupposes the reproducibility of appearances.⁴ He takes this to mean that it presupposes the possibility of a 'thorough-going' synthesis of reproduction, that is, of one which rests, not on occasional conjunctions of the given, but on necessary and universal conjunctions; or in other words on necessary synthetic unity (or transcendental affinity). If there is such a *necessary* synthetic unity in given appearances, it must have an *a priori* ground in the nature of the mind. Let us suppose that this *a priori* ground is a pure transcendental synthesis of the imagination⁵ which combines the pure manifold of time (and space).

So far we have a provisional analysis which attempts to

¹ See § 3 above. Whether we regard this transcendental synthesis as productive or reproductive is, as I have said, of minor importance. It is properly regarded as productive, but in this passage Kant describes it as reproductive. This may be the source of his obscure statements about 'necessary reproduction' in A 105-6.

² In the *Kritik der Urteilskraft*, *Einl.* V (V 181-6)—and especially in the '*Erste Einleitung*' IV (*Phil. Bib.* 39c, pp. 15-18)—Kant seems to recognise that the necessary synthetic unity proved in the *Kritik der reinen Vernunft* does not by itself guarantee that homogeneity and regularity which we all assume to be present in nature. I doubt whether he was aware of this when he wrote the present argument.

³ The last sentence of A 101; in Kemp Smith's translation: 'For if we can show . . . reproducibility of experience'.

⁴ I am beginning with the end of the sentence, where it overlaps into A 102.

⁵ This in turn is grounded in the unity of apperception.

discover, by a regressive argument, where we are likely to find the conditions of experience. If we are to justify our view of these conditions, we must proceed by a progressive argument.¹ This we are now in a position to do.

Kant believes he has proved that time (and in some degree space) are conditions of experience, and that appearances are not things-in-themselves, but mere ideas, which as such must necessarily conform to time, the form of inner sense. Hence all he has to show, at the present stage of the argument, is that a pure transcendental synthesis of imagination is necessary for knowledge of time (and space); or in other words that without such a transcendental synthesis we could not represent the pure manifold of time (and space) *as a manifold* or have one whole idea of time and space as possessing necessary synthetic unity. He assumes that this transcendental synthesis will impose necessary synthetic unity² on the empirical manifold given in time (and space), and in this way will make a thorough-going synthesis of empirical reproduction (and therefore experience itself) possible.³

Kant then shows—on the ground that it takes time for us to apprehend a pure manifold as a whole, or as combined in one idea—that a pure reproductive synthesis of imagination is necessary, if we are to know a line, or the time from one noon to another, or a definite number, and even if we are to know time and space themselves. The pure reproductive synthesis

¹ See Chapter VI § 2.

² This has already been asserted in A 79 = B 104. Kant makes his argument more difficult to follow by speaking, not about 'necessary synthetic unity', but about 'such a combination of the manifold as makes a thorough-going synthesis of reproduction possible'. I take 'combination' here as equivalent to 'necessary synthetic unity'. There is a further difficulty in the fact that he leaves it to us to make the connexion between such 'combination' and the pure transcendental synthesis of the imagination, which is mentioned later in the sentence.

³ He also assumes that the thorough-going synthesis of reproduction, since it has its ground in the necessary synthetic unity imposed by the transcendental synthesis of imagination, will be grounded on the *a priori* principles which are bound up with this necessary synthetic unity. These principles are primarily the Analogies of Experience. Compare '*a priori* rules of synthetic unity' in A 110.

of imagination is therefore a condition of all experience and all knowledge, and is properly described as transcendental.¹

Kant's exposition is awkward, and for this reason I have considered his argument in a different order, not only at the crucial stage, but throughout the subsection as a whole. Nevertheless no part of the argument is to be regarded as a digression.² There would be little point in insisting on the necessity for a pure synthesis of reproduction, unless it were also shown that this synthesis is a source of necessary synthetic unity; and in view of Hume's doctrines it was very important for Kant to distinguish clearly between an empirical synthesis of reproduction and the transcendental synthesis which is its condition.³

In this complicated exposition I have followed what I believe to be the orthodox translation and interpretation. Nevertheless it seems to me that another translation and interpretation is possible; for in the clause '*die eine durchgängige Synthesis der Reproduktion möglich macht*', '*die*' may be the object, and not the subject. On this translation Kant's argument is as follows: if we could show that even our purest *a priori* intuitions give us no knowledge except in so far as they contain a combination *which is made possible by a thorough-going synthesis of reproduction*, then this synthesis of reproduction (since it is a pure synthesis) is grounded on *a priori* principles independently of experience, and must be supposed to be a pure transcendental synthesis and a condition of the possibility of experience.

This version is simpler, for only one synthesis (the pure transcendental synthesis of reproduction) is in question; and it seems to describe better what Kant goes on to prove, namely that apart from a pure synthesis of reproduction we cannot

¹ Compare § 3 above.

² Nor do I think it necessary to hold with Adickes that the awkwardness in this and other cases must be due to a later insertion. Why should we assume that the first draft of an argument is likely to be the most clear?

³ Compare A 115-16 and A 766 = B 794. This was all the more important when Kant was himself describing the transcendental synthesis as reproductive.

have a *whole* idea of a line or a period of time or indeed of the one time (and space) which is a condition of experience—the *whole* idea being ‘an intuition which contains *combination*’. If we object that Kant *assumes* without argument that a pure synthesis of time and space will impose necessary synthetic unity, and so reproducibility, upon appearances, this objection applies equally to the orthodox view.

I believe that this interpretation finds some support in A 123, but the beginning of the paragraph seems to be against it.

§ 7. *The Synthesis of Recognition*

We already know that our synthesis of imagination has to be brought to concepts by understanding.¹ This doctrine Kant seeks to make more explicit in dealing with what is here called the synthesis of recognition in the concept.

The example by which Kant seeks to make his meaning clear is the act of counting. This is presumably a pure synthesis,² that is to say, the counting is concerned with abstract units, and not with concrete things like sheep or goats. His argument applies, however, both to pure and to empirical synthesis; and, as we have seen, an empirical synthesis always involves a pure synthesis as well.

If we are counting up to, say, twenty, we must remember (or recognise) that the units which we finally think of as twenty are the same as the units which we have counted on our way to this total. Kant regards this, rightly or wrongly, as involving the reproduction of the units in imagination; but the really important point is his contention that in order to count up to twenty units we must recognise, not only that the twenty units are the units we have counted, but also that the total is produced by one act of counting, that is, by the successive addition of unit to unit.

¹ A 78 = B 103; compare A 78 = B 104. See also Chapter XIII § 5.

² As in A 102. Even in A 99 the example he gives in connexion with the synthesis of apprehension is the idea of space. His main interest is directed to pure synthesis, because it is through the pure synthesis of time (and space) that the categories are imposed upon objects.

Such recognition involves the presence of concepts.¹ In particular it involves the concept of 'number', which Kant regards as the concept of the successive addition of homogeneous units to one another.² To recognise that this is the number twenty, we must have a concept of the general character of the synthesis by which number is produced. That is to say, we must be conscious, however dimly,³ of the *character* or the *rule* of the synthesis and so of its *unity*. These phrases are treated by Kant as if they were identical in meaning;⁴ and he asserts here that the concept of 'number' consists in consciousness⁵ of the unity of the synthesis.⁶

We can now state Kant's position more generally. In order to recognise any object as an object, we must unite in one idea the manifold which we have (1) intuited in successive moments, and (2) reproduced in imagination;⁷ and this means that we must, in one act of consciousness, be aware of the unity of the synthesis whereby the manifold is combined into one object. Such awareness Kant describes as 'recognition⁸ in the concept'. Were it not for this power of recognition, mere reproduction would be useless. We might have a variety of intuitions 'hovering' before us at any moment, but we should be unable to identify them

¹ It involves the concept of 'unit', all units being regarded as homogeneous with one another; see A 142 = B 182. It also involves the concept of the decad—we know that we have grasped the added units in two sets of ten; see A 78 = B 104. I take it that the concept 'twenty' is also involved, although the proposition in which the result is expressed is a singular proposition; see A 164-5 = B 205-6.

² Compare A 142 = B 182. Here as usual Kant identifies the concept of what is produced by the synthesis with the concept of the synthesis itself.

³ This qualification will be explained in § 8 below.

⁴ Compare Chapter XIII § 7.

⁵ This, I think, involves some degree of self-consciousness.

⁶ It should be noted that the judgement which makes use of the concept of 'number' is in some degree making explicit the rule which is at work in the synthesis of imagination and which gives that synthesis its unity; see Chapter XIII § 5. It should also be noted that number is the schema of the pure category of quantity; see A 142 = B 182. In applying particular concepts we are also, consciously or unconsciously, applying the categories.

⁷ See A 103.

⁸ The word 'recognition' presumably implies that reproduction and memory are involved.

with anything that went before,¹ or to find in them that unity without which they would not constitute an individual whole.

Kant is clearly right in holding that unity in consciousness and unity in the object are correlative, and that unless consciousness grasps the given elements together, these will not form one object for us. The interesting part of his doctrine is that such 'grasping' involves, not only one synthesis of the imagination, but also consciousness, however elementary, of the character of this synthesis, and so of the rule which is at work in it and is the source of its unity. To say this is to say that for knowledge of an object we require a concept of the synthesis whereby the manifold is combined in one idea or intuition.² Such a concept—and this is definitely Kant's doctrine—implies some degree of self-consciousness.³

Kant's own summary⁴ of his theory shows quite clearly that we are dealing with only one synthesis, and not with three. Apart from the addition that imagination is reproductive, it is identical with the doctrine of the Metaphysical Deduction.⁵ It prepares the way for the unity of apperception, and for the doctrine that there is no object (as distinct from given impressions) without concepts or without judgement.⁶

In this argument there are three main questions which require further elucidation before we can go on to consider the part played by the categories. These are (1) the nature of an 'object', (2) the nature of a 'concept', and (3) the nature of 'unity of consciousness'. It is these questions with which Kant now proceeds to deal.⁷

¹ This fact is, I think, sometimes forgotten in modern discussions about memory. Compare my article in *Mind*, Vol. XXXVIII, N.S. No. 151, pp. 320 ff.

² Kant even asserts that the word '*Begriff*' (concept) itself suggests consciousness of the unity of synthesis—presumably because '*begreifen*' (to conceive or understand) is to 'grasp together' or 'comprehend'.

³ Animals cannot have concepts because they have no self-consciousness; compare *Nachlass* 411 (XV 166).

⁴ In A 103.

⁵ A 77-9 = B 103-4.

⁶ A 104.

⁷ In spite of this *Vaihinger* alleges that Kant at this point (A 104) introduces notes belonging to a pre-Critical period, and entirely irrelevant to the argument!

Before we consider these, there are some points which require to be cleared up.

§ 8. *Clear and Obscure Ideas*

It would be absurd to suppose that in knowing objects we always make clear to our minds the concepts employed, and still more absurd to suppose that we consciously recognise these concepts to involve the unity of our act of synthesis.¹ Kant meets this difficulty by his doctrine that ideas may be either clear or obscure.

When an idea is present to our minds as different from other ideas it is a *clear* idea. When the elements of which it is composed are also clear, the idea is a *distinct* idea. The opposite of 'clear' is '*obscure*', and the opposite of 'distinct' is properly '*indistinct*', although in common philosophical usage it is '*confused*'. We make our clear ideas distinct by means of analysis.²

Since an obscure idea is not present to our minds as different from other ideas, it may be said to be an unconscious idea.³ This is a paradox, and Locke, in his attack upon innate ideas, rejected the existence of unconscious ideas. It is, however, possible to be *mediately* conscious of an idea, without being *immediately* conscious of it. Obscure ideas are those of which we are *mediately* conscious.⁴ We are not immediately aware of them, but they are involved in ideas of which we are immediately aware.

¹ For example, in counting up to twenty we need not make clear to ourselves that we are employing the concept of 'number', much less that the concept of number is, or involves, the concept of the unity of the synthesis whereby we successively add homogeneous units to one another. Nevertheless we must be dimly aware of the character of what we are doing, for otherwise we should not know that we had before us twenty units.

For the obscurity of the concept see also A 106.

² *Anthr.* §§ 5, 6 (VII 135, 137-8); *Log. Einl.* V and VIII (IX 33-4, 61-2); B 414-15 n.; A 77 = B 103; and also Leibniz, *De cognitione, veritate et ideis* (IX in the edition of J. E. Erdmann). Compare also Chapter XIII § 3 (p. 266 n. 4).

³ *Log. Einl.* V (IX 33).

⁴ *Anthr.* § 5 (VII 135).

That is to say (and it is, I suggest, true), there may be ideas implicit in our consciousness which we have not yet made explicit, and there are different degrees in which we make our ideas explicit. This is obvious, for example, as regards the laws of thought, which are presupposed by our thinking long before we make them clear to our own minds; but it is true also both of such concepts as are at work in recognition and of the unity of consciousness which they imply.

According to Kant the concept of an object implies consciousness of the unity of the synthesis without which the object cannot be known; and this consciousness must itself be *one* consciousness.¹ Such consciousness may be faint (or *obscure*) in various degrees. We may connect it with the production of the idea of the object only in its *effect*, and not in the *act* of synthesis itself, that is, not² immediately.³ In other words, in the act of synthetising an object, we may not be *immediately* aware of the unity of consciousness (or even of the concept)⁴ which is necessarily involved. The fact that such unity of consciousness must be involved can, however, be discovered by considering the *effect* of our act of synthetising, namely, that an object is known. If we know an object, then, as Kant says, *one* consciousness (or unity of consciousness) must always be present, although it may lack clarity⁵ and may not stand out⁶ among the ideas of which we are aware; and without this one consciousness (whether clear or obscure) there can be neither concepts nor any knowledge of an object.

More simply, this consciousness of the unity of the synthesis

¹ This is clearly a kind of self-consciousness.

² Kant omits the word 'not' which is implied after 'that is'. This seems to be a Kantian idiom; see B 72 '*weil sie nicht ursprünglich, d.i. eine solche ist . . .*'. Kemp Smith's translation inserts the 'not' which is required in English: 'it is not original, that is, is not such . . .'.

³ The emendation of Adickes seems to me to obscure, rather than to clarify, Kant's meaning. See Raymund Schmidt and Kemp Smith's translation.

⁴ Compare A 106.

⁵ Not merely 'distinctness' as Professor Kemp Smith's translation suggests. It is not separated out from other elements in the experience.

⁶ A 104. The actual words are '*die hervorstechende Klarheit mangelt*'.

may be obscure in varying degrees. It may not be immediately present to our minds, but a reflective analysis of the ideas immediately present to our minds will indicate that it must be present.¹

All this is, it must be admitted, full of difficulties. Nevertheless unity of consciousness is clearly necessary for knowledge of any complex object whose parts are successively apprehended. How far we are aware of this unity of consciousness, that is, how far we are self-conscious, may vary greatly in degree,² but we can always become aware of this unity by reflective analysis. The relation between concepts and unity of consciousness is less obvious, but the concept of any object is certainly impossible apart from unity of consciousness: it is perhaps impossible even without some awareness, however dim, of this unity of consciousness as manifested in the synthesis whereby we combine the manifold into one object; and this means that it is impossible apart from some awareness of the character (or rule) of the synthesis whereby we combine the manifold into one object. The fact that we do not ordinarily separate, or make clear, these different elements in our experience of objects is in any case irrelevant to the correctness or incorrectness of Kant's analysis.

§ 9. *Empirical and Transcendental Apperception*

If Kant had possessed a tidy mind, he would have pointed out (what is sufficiently obvious) that recognition in the concept involves understanding or apperception. He would also have asked whether there is a pure transcendental synthesis of recognition as well as an empirical one; for in this way alone, it would seem, can the parallelism of the threefold synthesis be complete. His failure to deal with these points and his slowness in coming to the distinction between empirical and

¹ This doctrine is stated more fully in A 117 n. Compare B 132-3 and B 134. For 'clarity' see also A 196 = B 241.

² I should imagine that in counting up to twenty there is usually a considerable degree of self-consciousness: we know what we are doing, even if our attention is not directed to our act, but to its results.

transcendental apperception¹ have led Vaihinger to maintain that the rest of subsection 3 has no connexion with what goes before. Yet it is one thing to recognise that Kant's argument is untidy, and quite another to maintain that it is not an argument at all.

There can be no reasonable doubt that in addition to empirical recognition by means of empirical concepts there is also pure recognition by means of pure concepts—the illustration from counting is itself an example of this.² The transcendental importance of recognition does not, however, depend upon the fact that in some judgements we employ pure mathematical concepts as opposed to empirical ones. It depends upon the fact that in all recognition and in all judgement there must be unity of thought and awareness (clear or obscure) of this unity.³ The empirical manifold given to sense is conditioned by the form of time (and space); the empirical synthesis of the given manifold is conditioned by the transcendental synthesis of time (and space); and the recognition of the empirical object and of the complex synthesis by which it is combined is conditioned by the unity of thought or of self-consciousness. Hence Kant ignores the difference between empirical and pure recognition, and discusses instead the difference between empirical and transcendental apperception—transcendental apperception being the ultimate condition of all recognition and the source of the forms of thought.⁴

¹ See A 107.

² Compare § 6 above. Every mathematical judgement is an example of pure recognition.

³ Kant believes this is necessary to conception and judgement as such.

⁴ The view taken in this paragraph is borne out by Kant's own summary of the provisional exposition in A 115. There the three subjective sources of knowledge are said to be sense, imagination, and apperception—the only three which Kant ever mentions, if (as even Vaihinger admits) apperception as a power can be identified with understanding. This passage displays Kant's usual carelessness in terminology, but it should be noted that empirical apperception is manifested in *recognition*, recognition being identified with 'empirical consciousness of the identity of the ideas reproduced with the appearances through which these ideas were originally given'. I take it that such recognition would cover the case where the manifold reproduced was itself pure.

To the distinction between empirical and transcendental apperception we shall come in due course. We must not, however, forget that transcendental apperception, although it is the condition of all recognition (including empirical recognition), is not a condition under which the empirical manifold is *given*. The empirical manifold must conform to the unity of apperception only because the empirical synthesis of imagination must conform to the transcendental synthesis of imagination; and the transcendental synthesis of imagination can conform to the unity of apperception, and so to the forms of thought, only because it is a pure synthesis.¹

¹ As a *pure* synthesis it rests upon a ground of synthetic *a priori* unity—see A 79 = B 104; as a pure *transcendental* synthesis it has its ground in the unity of apperception (and the categories), and it imposes necessary synthetic unity upon the pure manifold of time (and space), and consequently upon the empirical manifold given under the form of time (and space)—compare A 118, A 123, B 151-2. See also Chapter XIII § 6, and § 3 of the present chapter. This view has at least a show of plausibility if we regard the transcendental synthesis as essentially productive.

that nothing else is given to us which can correspond to our ideas and so be their object.

Kant's first suggestion is that the object must be thought of as an unknown 'something' to which our ideas somehow correspond. This 'something' is described as 'something in general'.¹ Since it has no known characteristics, the 'something' to which we refer one complex idea cannot be distinguished from the 'something' to which we refer another complex idea; or at any rate it can be distinguished only by the fact that we refer one complex idea to it and not another. If this is so, the concept of an object must be the concept of 'something in general = *x*'.²

This *prima facie* analysis Kant regards as inadequate, and he endeavours to carry it further. If we take our experience as it stands, we find that our thought of the relation between our ideas and the object involves some kind of *necessity*. The object—which at present we are regarding as an unknown something to which our ideas are referred—is thought of as preventing our ideas from being haphazard or arbitrary; or, to put the same point positively, it is thought of as a source of necessary agreement in our ideas. Ideas referred to an object must agree among themselves, that is, they must possess unity. From this we are expected to conclude that the concept of an object is essentially the concept of the necessary synthetic unity of our ideas.³

¹ 'etwas überhaupt.'

² I need hardly say that '*x*' here stands for the unknown, but it may perhaps be worth recalling that categories are concepts of an object in general—concepts of what an object must be if it is to be an object.

³ I have added the qualifications 'necessary synthetic' to 'unity'; compare A 101. This unity, as a synthetic or qualitative unity, is a unity of different elements, not the quantitative and homogeneous unity which is thought under the category of unity; see B 131 and B 114. The concept of this necessary synthetic unity is identified by Kant with the concept of an object, because it is the concept of the essential characteristic or necessary form of all objects, whatever may be the differences in their given matter. What distinguishes a real object from an imaginary one is that its elements are necessarily connected together (and ultimately that it is a part of the one objective world whose elements are necessarily connected together).

We have indeed spoken as if the essential character of the object were to be found in its being the *source* of necessary synthetic unity, and not in this necessary synthetic unity itself. Such a view is a transitional stage introduced in order to lead us to the true view of the character of the object and to clear our minds of erroneous theories. We have to do only with our ideas, not with an unknown something which corresponds to our ideas, and which in being different from all our ideas is for us nothing at all.¹ According to Kant, when we judge that the idea (or appearance) of this white house is an idea (or appearance) of a real object, we are judging that the elements of which it is composed are bound together in a *necessary* unity.² To know an object is to recognise the presence of this necessary synthetic unity in our ideas.³

All this must be taken as a *prima facie* analysis of experience in the light of doctrines already established. Its aim is to lead us up to the doctrine which Kant believes he is able to prove. It must not be taken as itself a proof.⁴

§ 3. *The Formal Unity of Consciousness*

On Kant's view the necessary synthetic unity which constitutes the essential character of an object of experience must, if it is properly to be regarded as necessary, have its origin in the nature of the mind. Hence he asserts that this unity is simply *the formal unity of consciousness in the synthesis of the*

¹ Kant is not here renouncing the thing-in-itself: he is only denying that we can know it, and that we can know it to be the source of unity in our ideas. Compare Chapters LV and LVI.

² Compare A 109.

³ How far such knowledge involves also a reference to an unknown 'something' or thing-in-itself is a difficult question. Kant always holds that the object we know, while it is not the thing as it is in itself, is the thing as it appears, and must appear, to human minds. The really important point, however, is that the necessary synthetic unity of the object comes, not from the thing-in-itself, but from the mind.

⁴ Kant has, however, already shown the necessity for unity on the subjective side; see A 103.

manifold of ideas.¹ This assertion is explained by the further statement that we know the object when we have produced synthetic unity in the manifold of intuition.

Here Kant seems to *identify* the unity of the object with the formal unity² of consciousness, and that this is not a mere slip is shown by several repetitions of the view.³ Perhaps such an identification can be justified on Copernican principles, but personally I find it difficult to justify, or even clearly to understand. It seems more intelligible to say that the unity of the object originates in, and is produced by, the unity of consciousness; and again that unity of consciousness is manifested only in the unity of the synthesis whereby the manifold is united into an object. In short, it seems easier to regard the unity of consciousness and the unity of the object as correlated and interdependent than to regard them as identical. Kant himself at times speaks of unity of consciousness and unity of the object as if they were correlated and interdependent;⁴ and if we find it easier to follow his argument on this supposition, I think we are entitled to adopt it. We must, however, leave open the possibility that the language which implies identification is the more exact expression of his meaning.⁵

¹ A 105. This formal unity of consciousness is, I think, the same as the unity of apperception; but it is perhaps possible that the unity of the transcendental synthesis of imagination could be described in similar terms. Compare A 118 and A 125; also Chapter XXI § 1 (at the end).

² This unity, as formal, is independent of differences in the matter synthesised; and I take it that (just as in the case of the forms of time and space) we should be able to understand both its internal necessity and its necessity as a condition of experience. The character of this necessity is discussed in A 106 (the second paragraph) and the following pages.

³ Compare, for example, A 109, where the relation to an object is said to *be* simply the necessary unity of consciousness. Such a view seems to be implied also when Kant identifies the unity of the object with the unity of the synthesis whereby the manifold is combined; and again when he identifies the concept of the object with the concept of the synthesis (or with the concept of the unity, or rule, of the synthesis).

⁴ See, for example, A 250, B 134, and B 143.

⁵ I believe that a doctrine of this type is to be found in Hegel and even in T. H. Green.

It should in any case be obvious that we have here no pre-Critical doctrine. The same theory is expressed more briefly in the second edition.¹ There an object is defined as 'that in the concept of which the manifold of a given intuition is *united*.' All unification of ideas is then said to demand unity of consciousness in the synthesis of these ideas. The inference is finally drawn, precisely as in the present passage, that it is the unity of consciousness which alone *constitutes*² the relation of ideas to an object.

§ 4. *Synthesis and Concepts*

Kant next proceeds to connect his doctrine of synthesis and conception³ with that formal unity of consciousness (or unity of apperception) which he has identified with the unity of the object. Since the concepts most obviously at work in the synthesis of recognition are particular concepts, he is obliged to explain the part played by such concepts in experience. For the purpose of illustration he uses the concept of 'triangle' and the concept of 'body'. These are particular concepts, and not universal concepts or categories—the categories are reserved for subsection 4. The first is presumably a pure, the second an empirical, concept.

Here again the order of exposition is awkward: we might have followed him more easily, if he had proceeded to explain at once what he meant by the formal unity of consciousness. Further difficulties arise from the fact that the language which he uses is in many ways obscure. I believe that if we are to obtain even an approximate understanding of what he means, we must remember that he is still giving us a provisional analysis of experience, not his 'progressive' and authoritative proof.⁴

¹ B 137.

² '*ausmacht*.' Compare A 109.

³ This doctrine is adumbrated in the Metaphysical Deduction (A 77-9 = B 103-4), and has been further elaborated in the account of the threefold synthesis.

⁴ We must indeed remember that the whole of Section 2 is provisional; see A 98.

§ 5. *Concept and Rule*

We have been told¹ that we know the object when we have produced synthetic unity—that is, necessary synthetic unity—in the manifold of intuition. This task is the work of a synthesis of imagination which must be brought to concepts; and in bringing the synthesis to concepts we make explicit, to a greater or less degree, the rule at work in the synthesis. Kant repeats this doctrine here by asserting (1) that synthetic unity is impossible, unless the total complex intuition can be produced by a function² of synthesis in accordance with a rule; and (2) that such a function of synthesis makes possible a concept in which the given manifold is united. The concept is made possible by the synthesis because it is a concept of the rule of the synthesis: if there were no rule in the synthesis, there could be no concept.

So far we have nothing new, but Kant says further that the function of synthesis also makes the *reproduction* of the manifold necessary *a priori*. A similar phrase recurs later,³ and we may postpone consideration of its meaning.

Kant illustrates his doctrine by the concept of 'triangle'.⁴ When we think a triangle as an object, we are conscious⁵ of the combination (or synthesis) of three straight lines in accordance with a rule,⁶ and an intuition of triangle can always be produced⁷ by such a synthesis.⁸

¹ A 105.

² It is perhaps safer to suppose that 'function' is not here used in a technical sense, but it may indicate that the synthesis must be *one* act; compare A 68 = B 93. The word I have translated as 'produced' is '*hervorgebracht*'.

³ In A 106. For the discussion of this, see § 7 below.

⁴ We must remember that the concept of 'triangle' is not a singular idea, not an idea of 'this triangle'. It is the idea of the universal character 'triangularity' present in this and other triangles; see Chapter IX § 4.

⁵ This, I think, implies a concept of the synthesis (or rule of synthesis).

⁶ Note that in A 141 = B 180 this rule is identified with the 'schema' of triangle. ⁷ '*dargestellt*'.

⁸ The illustration explains, in the reverse order, the two general assertions just made: it throws no light on 'necessary reproduction'.

The concept of 'triangle' is presumably a pure mathematical concept, and the synthesis is a synthesis of the pure manifold of space; but it is doubtful whether we are to attach importance to this, since the assertion for which this illustration is given seems to be quite general. If we pass over the difficulty about necessary reproduction, we have merely Kant's usual doctrine that in order to know an object the manifold must be united in accordance with a rule of synthesis which is made explicit in the concept of the object.¹ He expresses this here by saying that this unity of rule determines all the manifold;² and he adds that it limits the manifold to conditions which make the unity of apperception possible. This further statement is, at the present stage, obscure; but so far as unity of apperception is necessary for unity of rule, the manifold—if we are to know an object—must conform to the conditions³ without which there could be no unity of apperception.

We are then informed that the concept of 'this unity' is the idea (or concept) of the object = x . Unfortunately Kant's language leaves it uncertain whether by 'this unity' he means 'the unity of the rule' or 'the unity of apperception'.⁴ His general position is, however, clear enough. When we think an object such as a triangle, we do so not merely by means of the particular predicates contained in the concept of 'triangle'; we also think of it *as an object*, and therefore bring it under

¹ Compare Chapter XIII § 5.

² We may add 'so far as it constitutes an object'.

³ These conditions are the forms of thought or the categories; compare A 111. It would be as true to say that the unity of apperception is the condition of the categories as to say that the categories are conditions of the unity of apperception.

⁴ Whichever interpretation we adopt, it will make little difference to Kant's doctrine. The unity of the rule is the unity manifested whenever we know an object by means of a concept; and this universal unity of rule is dependent on the unity of apperception as the unity of apperception is dependent upon it. On the whole it seems simpler to take Kant as identifying the concept of the object in general with the concept of the unity of apperception, provided we remember that the unity of apperception is necessarily manifested in unity of synthesis and unity of rule.

the concept of 'an object in general'.¹ This concept (which is a concept of the necessary synthetic unity characteristic of all objects) is identified by Kant with the concept of the unity of apperception, and in the present passage perhaps also with the concept of that unity of rule in which the unity of apperception is manifested.²

§ 6. *Empirical Concepts*

All knowledge, whether empirical or pure, requires a concept, however imperfect³ or obscure⁴ the concept may be; and the concept must always be universal, so far as its form is concerned.⁵

This is true whether we are dealing with pure concepts like 'triangle' or empirical concepts like 'body'. The account which Kant has given is intended to be general, and since pure mathematical concepts differ in many ways from empirical concepts, it is necessary to see how the account can apply to empirical concepts.

An empirical concept also is, or contains, a rule.⁶ The

¹ We need not make this concept 'clear' to ourselves; still less need we make it 'distinct' by discovering on analysis that it is identical with the concept of the unity of apperception.

² If the concept of 'triangle' is a pure concept of mathematics, Kant's illustration is not altogether satisfactory; for a mathematical triangle is, strictly speaking, not an object, but only the form of an object (see B 147), and it is not the appearance of a thing-in-itself. The concrete physical triangle alone is an object proper; and it is a thing, not as it is in itself, but as it must appear to human minds. Kant has presumably chosen his example because the connexion between the concept and the rule of synthesis is obvious. If his statement is intended to cover the concrete physical triangle, the problems raised are similar to those connected with 'body' in A 106.

³ To possess logical 'perfection' a cognition should be (1) universal, (2) distinct, (3) true, and (4) certain; see *Log. Einl.* V (IX 38). By 'imperfect' here I think Kant means primarily 'imperfect in quality', that is, 'indistinct'.

⁴ 'Obscure' is the opposite of 'clear'. We need not be immediately conscious of the concept, still less need we have analysed it and so made it 'distinct'.

⁵ Compare *Log.* § 2 (IX 91): 'The form of concepts is their universality, their matter is their object'.

⁶ Or 'schema', compare A 141 = B 180.

concept of 'body', for example, serves as a rule for our knowledge of appearances in space. It is concerned, as we should expect, with the unity of that manifold which is thought or conceived through it.¹

The concept of 'body' can serve as a rule for synthetising intuitions, only if 'it represents, in given appearances, the necessary reproduction of their manifold, and therefore the synthetic unity in our consciousness of them'.

The concept of 'body' is a concept of body as an object, and therefore it naturally represents that necessary synthetic unity² which is, and must be, present in appearances, if they are to constitute an object. According to Kant this implies that the concept of 'body' must also represent the necessary synthetic unity of our consciousness of such appearances.

It is more difficult to understand what Kant means when he says that the concept of 'body' must represent the *necessary reproduction* of the manifold of given appearances.

This phrase was used also in regard to the concept of 'triangle', but the two cases are very different. We are not thinking about a mathematical body which can be constructed *a priori* in pure intuition. We are thinking about a concrete physical body, as Kant himself makes perfectly clear. The concept of body, when we *perceive*³ anything in space, makes the idea of extension (and therefore of impenetrability, shape, and so on)⁴ necessary.

¹ A 106, '*nach der Einheit des Mannigfaltigen*'. Substitute 'in regard to the unity' for 'as the unity' in Kemp Smith's translation. Compare also A 140 = B 179.

² Such unity is the condition of the necessary reproducibility of appearances; compare A 101.

³ Not 'imagine'.

⁴ 'Extension, impenetrability, shape, and so on' are all thought in the concept of body, and the judgements which attribute these to bodies are analytic judgements; see B 12. In the *Prolegomena* (IV 289) Kant asserts that these are the primary qualities of a body, and are dependent upon space. In A 21 = B 35 he suggests that impenetrability (like hardness and colour) belongs to sensation, and only extension and shape belong to the pure intuition of space. In A 284 = B 340 substance itself is identified with 'impenetrable extension', which in turn is identified with matter in A 398.

In spite of the difficulties raised by some commentators I can see nothing pre-Critical in such a statement. It is little more than an elaboration of what Kant has already said in his analysis of the object. When we perceive any object, we think that all our ideas of it *must* be consistent with one another. When we perceive a body, we think that it *must* have extension, impenetrability, shape, and so on. This is a necessity which we all recognise in our experience.¹

Kant is still giving us his *prima facie* analysis of experience. He is not using this necessity as a premise for his argument, but is directing our attention to something in experience which requires explanation and justification. By this means he leads us up to the unity of apperception and the categories; but the doctrine of the unity of apperception is established independently, and only so can it justify and explain the apparent necessity which we find in experience.

The necessity, as Kant immediately goes on to explain, is not due to the concept of body taken by itself. It is due to the fact that when we think the manifold under any concept, we bring it under the unity of apperception. Why it should be assumed that Kant knew nothing of the categories when this was written passes my comprehension. He has a right, and even a duty, to explain the unity of apperception and its relation to concepts, and especially to the concept of an object in general, before he goes on to show that the categories are involved in the unity of apperception.² The four short pages in which he does so seem to me none too long.

¹ We must also remember that when we judge this to be a body, we also judge it implicitly to be an object and so to have necessary synthetic unity.

² We already know that the concept of an object in general differentiates itself into the categories (A 93 = B 126); and we know from the Metaphysical Deduction that when we unify the manifold by means of any concept we are judging, and that such judgement by means of its form imposes the categories upon objects; see especially A 79 = B 104-5.

§ 7. *Necessary Reproduction*

The chief difficulty which I see in the passage is the phrase 'necessary reproduction'. We have two statements to consider. There is first of all the general assertion—illustrated by the example of 'triangle'—that 'the function of synthesis in accordance with a rule' makes the reproduction of the manifold necessary *a priori*.¹ And secondly there is the assertion that the concept of 'body' can serve as a rule for intuitions only if it 'represents the necessary reproduction of the manifold of given appearances'.² In spite of the differences in terminology, and in spite of the differences between a pure and an empirical concept, it seems to me probable that Kant's doctrine in these two statements is intended to be the same.³

It may be thought that Kant means something comparatively simple, namely, that the concept of the object controls the synthesis of reproduction, whether that synthesis be empirical or pure. For example, in knowing a triangle the concept of 'triangle' will compel me to reproduce the side AB when apprehension has gone on to side BC; and again in knowing a body, the concept of 'body' will compel me to reproduce extension when apprehension has gone on to impenetrability.⁴

I cannot bring myself to accept this simple explanation,⁵

¹ A 105.

² A 106.

³ The concept 'represents' necessary reproduction, because it is a concept of the rule of such a synthesis as makes reproduction necessary *a priori*.

These two passages should be compared with several others: with the statement in A 108 that 'the rules of synthesis make appearances necessarily reproducible', and so determine an object; with the two statements in A 101 about making 'reproduction of appearances' possible, and about making 'a thorough-going synthesis of reproduction' possible; and with the doctrine of affinity in A 121 ff.

⁴ These would be examples of association by affinity; compare Chapter XIX § 4 and A 122.

⁵ This explanation is concerned only with the law of *subjective* reproduction which is empirical and not *a priori*; see A 100, A 121, and B 152. I doubt if it can be justified even on the ground that Kant in A 102 regards the pure transcendental synthesis as reproductive.

and I believe Kant is trying to state something more difficult and more obscure. I think he is concerned with that necessary synthetic unity of the object upon which rests the possibility, and indeed the necessity, that all appearances should be in themselves 'associable'.¹ He appears to me to be suggesting that the synthesis in accordance with a rule (or a concept) *imposes* necessary synthetic unity on the manifold.² To do this is to make possible a thorough-going synthesis of reproduction,³ or to make appearances necessarily reproducible.⁴ This doctrine offers no difficulty in the case of pure concepts like 'triangle'.⁵ In the case of empirical concepts the statement can be accepted only as a provisional analysis of our experience, the proper significance of which is explained in the following paragraph⁶ by reference to the unity of apperception.⁷

Kant's statement is certainly not clear in itself,⁸ and it is possible that his thinking is confused.⁹ Nevertheless he has warned us to expect obscurities which will be clarified only by what comes later.¹⁰ This makes it more than usually illegitimate to interpret the passage as if it stood entirely alone;

¹ Compare A 122.

² Strictly speaking, it does so only because it involves, and is conditioned by, a transcendental synthesis of imagination.

³ Compare A 101 and Chapter XIX § 6.

⁴ Compare A 108 and A 122.

⁵ Compare A 78-9 = B 104 and Chapter XIII § 6.

⁶ The second paragraph of A 106.

⁷ The synthesis in accordance with the empirical concept of 'body' imposes necessary synthetic unity on the given manifold only because it is also a pure transcendental synthesis based on the unity of apperception (compare A 101, A 108, and A 122-3) and therefore on the categories.

⁸ I should have felt little difficulty, if he had spoken of 'necessary reproducibility' instead of 'necessary reproduction'.

⁹ Confusion may result from the fact that he has spoken as if the pure transcendental synthesis of imagination were itself reproductive. The 'necessary reproduction' of which he speaks may in that case be the transcendental synthesis which combines the given manifold in accordance with the categories. This should not be described as 'reproduction' at all. The empirical concept 'represents' this synthesis only because it presupposes the categories.

¹⁰ A 98.

and while I do not speak with confidence, I think we are justified in finding here the doctrine of the transcendental affinity which is more clearly expressed in his later exposition.¹

¹ In A 121 ff. The passage should also be compared with B 142.

CHAPTER XXI

APPERCEPTION AND THE UNITY OF NATURE

§ 1. *Necessary Synthetic Unity and Apperception*

The essential characteristic of an object, according to Kant's provisional analysis, is *necessary* synthetic unity, and this unity has been identified with the formal unity of consciousness in the synthesis of the manifold of ideas.¹ But all necessity must have a transcendental ground or condition—it could never be derived from empirical concepts.² To have a transcendental ground is to be derived from the nature of the knowing mind. Hence if we are to justify our belief in the necessary synthetic unity of the object—and in the unity of consciousness necessarily present in the synthesis of the manifold of *all*³ our intuitions—we must discover its transcendental ground; and this will at the same time be the transcendental ground of our concepts of objects in general,⁴ and consequently of all objects of experience⁵—for without these concepts (or categories) we could not think any object for our intuitions.

This transcendental ground or condition is transcendental

¹ See A 105 and also A 106.

² A 106; compare A 111.

³ Here Kant may be passing from the unity of consciousness present in the synthesis of *each* separate object to the unity of consciousness present in the synthesis of *all* objects, which taken together constitute the world of experience; compare § 7 below.

⁴ It is perhaps conceivable that this may refer here to concepts like 'triangle' and 'body': but I believe it refers to the categories, which alone are strictly concepts of objects in general. Since the categories are concepts of the necessary synthetic unity which is the essential characteristic of all objects, the transcendental ground of necessary synthetic unity is also the transcendental ground of the categories; and indeed necessary synthetic unity is imposed on the manifold only by means of the categories.

⁵ An 'object' is defined by Kant in this passage as 'something the concept of which expresses necessity of synthesis'. Here again the concept of the object includes—and is perhaps identical with—the concept of necessary synthesis.

apperception, and it is not derivative, but ultimate or 'original'.

This is the point at which we really come to grips with the most central, the most important,¹ and yet in some ways the most elusive, of all Kant's doctrines. His thought is no doubt difficult enough in itself, but the difficulty is greatly increased by his carelessness in the use of language. How far this carelessness of language represents a real confusion of thought is to me a matter of uncertainty; but it is no easy task to clarify, and if possible to reconcile, statements which too often are, at least verbally, incompatible.

Thus apperception is spoken of as a power or faculty,² which I have taken to be identical with understanding. But it is also spoken of as an act³—an act of spontaneity which is identified with the idea⁴ 'I think' accompanying all my ideas. No doubt the power of apperception is manifested in the act of apperception, but we must keep in mind these two different meanings when we consider Kant's other assertions; for example, his identification of apperception with the simple idea 'I',⁵ or again with 'thorough-going self-identity'.⁶

The difficulties seem to me to concern chiefly the act, rather than the power, of apperception. In particular there is the difficulty how far this act can be separated, even in thought, from the synthesis of imagination, and especially from the transcendental synthesis of imagination.⁷

¹ To regard the stress laid upon it as due merely to Kant's private convictions seems to me erroneous. Compare Kemp Smith, *Commentary*, pp. 212 and 261.

² Compare A 94, A 114, and A 117 n. This power is explicitly identified with understanding in B 134 n. Curiously enough the *unity* of apperception (in relation to the synthesis of imagination) is identified with understanding in A 119. Compare also *M.A.d.N.* (IV 554).

³ B 132. This act might be described as a formal act, and it seems at times to be equivalent to the form (or unity) of acts of judgement.

⁴ This idea is a concept, or better a judgement; see A 398. Compare also A 342 = B 400 and A 348 = B 406.

⁵ See B 68.

⁶ A 116.

⁷ This difficulty is already present in the immediately preceding passages. In A 105 'the *formal* unity of consciousness in the synthesis

§ 2. *Empirical and Transcendental Apperception*

Kant seems to take it for granted that apperception is to be identified with self-consciousness¹—a word which also may be used ambiguously either for a power or for an act (or state)—and he proceeds to distinguish empirical from transcendental apperception.²

It should be noted that Kant sometimes speaks as if pure or transcendental apperception were equivalent to self-identity,³ and this has led some commentators to stress self-identity at the expense of self-consciousness.⁴ Such a view is legitimate to this extent—that Kant does not maintain consciousness of self to be necessarily a 'clear' idea.⁵ Nevertheless although it may be convenient at times to take apperception—or, better, the unity of apperception—as equivalent to the unity or identity of the thinking self, it seems to me quite certain that Kant regarded self-consciousness (not merely self-identity) as necessary for all knowledge of objects,⁶ and considered

of the manifold of ideas' (identified with the unity which constitutes the concept of the object and makes the object necessary) seems to be the unity of apperception. If so, then in A 106 'the synthetic unity in the consciousness of the manifold' (which is represented by the rule) ought presumably to be the unity of apperception. Immediately thereafter we are told that we must find a transcendental ground 'for the unity of consciousness in the synthesis of the manifold of all our intuitions', and this transcendental ground is transcendental apperception. Kant may mean that transcendental apperception is the ground of the unity of apperception, although if so, we should like to know whether 'transcendental apperception' is used here for the act or for the power. But perhaps he may mean that transcendental apperception is the ground of a unity manifested in the synthesis of imagination.

Note that in A 117 pure apperception is said to give a principle of the synthetic unity of the manifold in all possible intuition, and in A 118 this synthetic unity is said to presuppose, or *include*, a pure synthesis, namely the transcendental synthesis of imagination.

¹ This, I think, is the ordinary usage of Leibniz. The corresponding word in Descartes is '*conscientia*'. ² A 107. ³ See A 116.

⁴ Notably Ewing, *Kant's Treatment of Causality*, pp. 49–50.

⁵ See A 117 n.

⁶ To know an object as an object implies the distinction between the object on the one hand and the self and its states on the other.

apperception to be equivalent to self-consciousness. To ignore or minimise this doctrine is to reject Kant's repeated assertions and to omit an essential part of his theory.

The clearest account of the difference between empirical and transcendental or pure apperception is to be found in the *Anthropologie*, and I think that the same doctrine lies behind Kant's briefer statements in the *Kritik*. The knowing mind is both active and passive, and to be conscious of self we must be conscious both of what the mind does (its thinking) and of what it suffers (its states).¹ The first kind of self-consciousness belongs to the understanding and is pure apperception; the second is empirical apperception or inner sense.² The form of inner sense is time, and inner sense perceives the relations of mental states only in time, and consequently in a continual flux.³

This doctrine is borne out as regards empirical apperception by the passage we are considering.⁴ Empirical apperception is consciousness of the self with regard to the determinations of our *state*, and is commonly called inner sense. It is always changing,⁵ and there can be no permanent or abiding self in the flux of inner appearances.

¹ *Anthr.* § 24 (VII 161). Compare the whole argument of the Paralogisms; also *Nachlass* 4723 (XVII 688).

² *Anthr.* § 4 at the end (VII 134 n.). It may be noted that in psychology we study ourselves in accordance with the ideas of inner sense, while in logic we study ourselves in accordance with what is given by intellectual consciousness, the self-consciousness of the understanding; compare B 134 n. Logic studies the 'I' as a *subject* of thought; psychology studies it as an *object* of perception. I can, however, be conscious, through inner sense, of the changes in my inner states, only because I represent myself, through pure apperception, as one and the same *subject* in these different states.

³ *Anthr.* § 4 (VII 134). Compare B 275 and B 133. The permanent, according to Kant, is to be found only in space.

⁴ A 107.

⁵ Presumably it is the acts (and not the power) of empirical apperception which are always changing. Yet these change only as regards their matter: their ultimate form, the 'I think' which accompanies all our ideas, remains the same.

§ 3. *Inner Sense and Empirical Apperception*

It is difficult to be sure how far Kant accepts the identification of inner sense and empirical apperception. Empirical apperception is identified here with what is *commonly* called inner sense, but a distinction between them is implied later.¹ In the second edition² Kant says that he carefully distinguishes between inner sense and apperception, but by 'apperception' there he seems to mean 'pure or transcendental apperception'. In the *Anthropologie*, which is one of his latest works,³ inner sense and empirical apperception are, as we have seen, once more identified.

The whole doctrine of inner sense is full of difficulties and is reserved for discussion later.⁴ Nevertheless it may be observed that if inner sense is properly called 'sense', it must be distinct from understanding, even though it can belong only to beings possessed of reason⁵ and is impossible apart from the activity of understanding.⁶ Empirical apperception, on the other hand, ought to be the power of understanding as manifested empirically in the recognition of our states of mind. Such recognition no doubt involves inner sense, but empirical apperception and inner sense ought to be different powers.⁷

This interpretation is necessary if the doctrine of the threefold

¹ A 115-6.

² B 153.

³ It is, however, of a semi-popular character.

⁴ See Chapters LII and LIII. A provisional statement has been given in Chapter IV § 4.

⁵ *Die falsche Spitzfindigkeit* (II 60). In this passage reason is not, I think, opposed to understanding.

⁶ See B 153-4 and B 68. Why this is so must be left over for the present, but it may be suggested that if inner sense is dependent upon time, there can be no awareness of time apart from memory and judgement. Such a view may indeed be denied in the light of modern theories about the specious present, but I am not sure that this denial would be justified.

⁷ By inner sense we should be aware of what is directly before the mind. By empirical apperception we should be aware of the nature of our thinking so far as it is empirical (or particular): this clearly requires inner sense. By transcendental apperception we should be aware of the nature of our thinking so far as it is formal.

synthesis is to be intelligible, and it finds definite support in Kant himself.¹ There are three subjective sources of knowledge on which all knowledge depends. These are sense, imagination, and apperception, each of which can be considered empirically, that is, in their application to given appearances. Appearances are 'represented'² empirically by *sense* in *sense-perception* (which of course involves apprehension), and all sense-perceptions as ideas are subject to time as the form of *inner* intuition. Appearances are 'represented' empirically by *apperception* in *recognition*, which is described as 'consciousness of the identity of the reproduced³ ideas with the appearances through which they were given'.⁴ Such recognition clearly involves concepts and must be the work of understanding, not of inner sense.

Kant's view seems to be this: that in all knowledge of objects we must be able, not only to reproduce, but also to remember, a series of given appearances. Such memory is a memory of the order in which the appearances were given or perceived, that is, of the order in which they became modifications or states of our mind. Apart from such a memory we could not know any object; and Kant seems to hold that in regarding appearances as appearances of an object, we must at the same time remember them as appearances given to, and so as modifications of, the knowing subject.⁵ This is the work of empirical apperception.

Empirical apperception on this view is not passive sensibility, but the active power of memory and judgement, through

¹ See A 115-16 and compare Chapter XIX § 9.

² We might translate this as 'cognised', if we remember that such 'cognition' is only an element in our knowledge of objects.

³ Reproduction is the work of imagination, but that we need not consider here.

⁴ 'Consciousness that what we now think is the same as what we thought a moment ago'—see A 103—must be recognition by means of empirical apperception. Without it all reproduction is useless.

⁵ The temporal order of appearances as modifications of the mind may of course be different from the temporal order of these appearances in the object. The appearances of a house are given to me successively, but are coexistent in the object. Compare A 190-1 = B 235-6 and the Analogies generally.

which the distinction of subject and object is made.¹ Kant stresses the fact that the acts of judgement in which empirical apperception is manifested are a recognition or memory of past ideas, or past states of mind, and are necessary for knowledge of the object.² They appear, however, to include knowledge of the object as well as knowledge of our states of mind. Recognition is recognition 'in the concept'; and the concept is a concept both of the object and of the particular synthesis through which ideas successively given are combined in the object.

This, however, raises a further difficulty. Empirical apperception is said to be concerned with states of mind, but it must at the same time be concerned, not only with the order in which these arise in our mental history, but also with the particular way in which (as appearances) they are combined in the object. This means that it must be concerned with the act of synthesis, so far as that act is empirical (or, perhaps better, 'particular').³ This seems to be the view of Kant himself, for he implies that empirical apperception (or empirical consciousness that what we now think is the same as what we thought before) involves knowledge, obscure or clear, of the *act* whereby successively given appearances are combined in one idea.⁴

¹ It is not to be supposed that we first recognise appearances as states of mind, and then refer them to objects. We can recognise states of mind only in distinction from objects, and we can recognise objects only in distinction from states of mind—though such a distinction may have different degrees of clarity. This distinction has no existence for sense and imagination by themselves: it presupposes the principles set forth in the Analogies. ² See A 103-4.

³ It must be concerned with the act of synthesis so far as that act is bound up with particular kinds of manifold and particular kinds of objects such as triangles or bodies—it is a matter of indifference whether the manifold in question is pure or empirical. So far as the act is universal, that is, involved in knowledge of any and every object as such, it is the concern of transcendental apperception.

⁴ See A 103. This act is, for example, the particular act of addition present in counting so many units; the universal act of synthesis which is an element, not only in counting, but in all knowledge whatsoever must be known through transcendental apperception.

The acts of recognition in which empirical apperception is manifested are acts of thought, and as such are conditioned by the forms of thought and by the unity of thought (or apperception).

§ 4. *Transcendental Apperception*

Our main concern is with transcendental apperception. Unfortunately the meaning of this term is here indicated only incidentally, and by no means clearly.

As a power, transcendental apperception must be identified with pure understanding, but the word 'apperception' indicates that this power involves some kind of self-consciousness. It is pure or transcendental as the source of *a priori* cognitions. These cognitions are in the first place the act of pure apperception itself, and in the second place the categories. The act of pure apperception and the categories are alike elements in, and conditions of, our ordinary empirical judgements.¹

The main difficulty concerns the act of pure apperception in which transcendental apperception is manifested; and when Kant speaks here² of transcendental apperception as 'this pure, original, and unchangeable consciousness', and again³ as 'the original and necessary consciousness of the identity of the self', he must be treating it, not as a power, but as an act. This act appears to be at once an act of thinking and a consciousness of thinking⁴—all thinking being in some degree self-conscious, even if we do not separate out this element

¹ Note that in A 115 sense, imagination, and apperception—here presumably capacities or powers—are all described as '*a priori* elements or foundations' (conditions), which make the empirical use of these powers possible. There is no opposition between being an element in, and a condition of, empirical judgements. The condition does not precede the judgement, but is a necessary element within it, without which it could not be.

² A 107.

³ A 108.

⁴ Hence it is described as the judgement 'I think'; see A 399. It is purely intellectual (B 423 n.), and it gives us no knowledge of an object (B 406, B 429)—except in so far as the activity of thinking determines a manifold given to sense.

in it or bring it explicitly before our mind.¹ Furthermore this act is a consciousness of the unity or identity of thinking,² not of those differences within it which are determined by the differences in its matter.³ We might perhaps describe it as consciousness of the ultimate and necessary form of thought,⁴ or perhaps better of the ultimate and necessary form of knowledge.⁵ As such it is an *a priori* element in all knowledge, and it exists concretely only as such an element.

This doctrine finds parallels in other parts of Kant's philosophy. Sensibility gives us pure intuitions (time and space) whose content is the forms of intuition. Understanding gives us pure concepts (the categories) whose content is the forms of thought (so far as given intuitions are determined in relation to these forms); and these pure concepts are described as acts of pure thought.⁶ We have now come to the ultimate (or fundamental) act⁷ of pure thought whose content is the ultimate form or unity of thought itself.

It seems not unreasonable to say that in knowing any object there must be present a judgement, which we may indicate by the form 'S is P'. But such a judgement is not only an awareness that S is P: it involves also, dimly or clearly,

¹ The act of pure apperception is not to be regarded as introspection, nor is it the judgement 'I think that I think'.

² This unity is supposed to articulate itself necessarily in the forms of judgement, and so in the categories.

³ These differences, being empirical, must be known through empirical apperception.

⁴ Compare 'the formal unity of consciousness' in A 105. Kant habitually identifies the form and unity of thinking; for example, in his definition of 'function' in A 68 = B 93.

⁵ In A 129 the form of all knowledge of objects is said to consist in the unity of possible consciousness. Compare 'the intellectual form of all knowledge of the object' in the same passage. The references to 'the pure form of all possible knowledge' in A 118 and 'the form of an experience in general' in A 125—compare also A 110—may also be relevant, though certain complications are involved which need not be considered here. In B 169 the original synthetic unity of apperception is described as 'the *form* of understanding in relation to space and time as original forms of sensibility'.

⁶ See A 57 = B 81 and Chapter XI § 2.

⁷ I take '*Aktus*' and '*Handlung*' to be synonymous; compare B 130.

the judgement 'I think¹ that S is P'. We need not be immediately aware of the idea 'I think'; but it is involved in, and presupposed by, the ideas of which we are immediately aware. To know an object is to distinguish that object, however dimly, from the states and acts of the self through which it is known.

The peculiarity of Kant's doctrine is that from the total judgement 'I think that S is P' he separates out the purely formal element (which is the same whatever be the object judged), and describes it as an act of pure apperception. This act, when we abstract from all empirical elements, can be nothing but the thought of the necessary unity (or form) of thinking itself.²

§ 5. *The Unity of Apperception*

Throughout all this Kant is attempting to analyse experience, and, by abstracting from the empirical elements in it,³ to determine its necessary conditions or elements.⁴ So far as these elements are elements in thinking, there is a certain difficulty in speaking of them as acts; for it is the whole thought which is naturally regarded as an act, rather than any element within it.⁵ Kant himself tends at times to speak

¹ A modern view, found notably in Cook Wilson and Prichard, maintains, if I understand it aright, that thinking and knowing are fundamentally different acts, the first necessarily implying fallibility or uncertainty, while the second implies infallibility. If this is true, Kant's analysis is defective, although not for that reason worthless. Personally I am not convinced that the modern distinction—supported though it be to a certain extent by Plato—is one which will bear philosophic examination; and I feel justified in following Kant's terminology, according to which all employment of concepts is thinking, and such thinking is knowledge when the concepts are applied correctly to actual—or at the very least to possible—objects of experience. Compare Chapter II § 4.

² Kant, at least at times, identifies this with the necessary unity which is the essential characteristic of an object.

³ Compare A 96.

⁴ These conditions do not precede experience; they are necessary elements in experience without which experience could not be.

⁵ Compare the difficulties raised in Chapter XI § 2.

as if the ultimate condition of experience were the unity of consciousness or of apperception, rather than the act of apperception which has that unity as its content. In the passage with which we are at present concerned,¹ his attention is concentrated on the unity of apperception to the neglect of the act, and he seems to speak almost as if the act of apperception and the unity of apperception were one and the same thing.²

If such an identification could be defended, it looks at first as if we should be compelled to say that the act of apperception is strictly not an act at all, but is merely a name for the unity present in all thinking. Pure apperception in that case would be equivalent to self-identity rather than self-consciousness.³ Such a view, however, omits an essential part of Kant's doctrine, as we shall see more clearly in the sequel. The alternative is to say that the unity present in all thinking or in all knowledge is itself a formal act—if such a thing is possible—and one which is conscious of itself.⁴

In these matters it is difficult to avoid talking nonsense,

¹ A 107.

² With this we may compare the way in which he speaks of pure intuition and the form of intuition almost as if they were identical; and again his habit of treating the concept of the synthesis and the concept of the unity of the synthesis—and even the concept of the object and the concept of the unity of the object—as the same thing. There are, of course, differences in these parallels, on which it would be unprofitable to enlarge.

³ Compare A 116.

⁴ The pure act of apperception is an element in, and a condition of, all acts of empirical apperception—just as pure intuition is an element in, and a condition of, all empirical intuitions. The peculiarity of the pure act of apperception is that it is the source of the necessary unity of all acts of empirical apperception (while the differences in different acts of empirical apperception are due to the differences in the matter recognised); and it is also (obscurely or clearly) consciousness of this unity. Compare A 79 = B 104 (where the concepts which give unity to the pure synthesis consist only in the representation of this necessary synthetic unity).

Kant seems at times to identify consciousness of unity with unity of consciousness; for example, in A 103 a concept is described as 'consciousness of unity' and immediately thereafter as 'this one consciousness'. Hence it is not altogether surprising if he seems to identify the act of apperception with the unity of apperception.

and those who insist that every term must be defined clearly before it is used will find no satisfaction in Kant. On the other hand I see no reason to hold that a simple view, sharply defined, is for that reason likely to be correct; and I believe it is more important to discover, if we can, what Kant is talking about than it is to seek perfect precision in the definition of words. Thus I think we can understand what he is talking about when he speaks of the necessary unity of the object, although volumes might be written on the precise shades of meaning which that term might be taken to convey. What is meant by the unity of thinking, or of consciousness, or even of apperception, may seem to some as easily intelligible as what is meant by the unity of the object; but I must confess that it appears to me difficult to be sure what Kant is talking about in these terms, and only too easy to imagine that he is referring to something quite different from what he really had in view.

The phrase 'unity of apperception', inasmuch as it implies some kind of self-consciousness, is more difficult than phrases like 'unity of thought', 'unity of consciousness', or even 'unity of self' and 'self-identity', difficult as these are; and it may perhaps be a help if we keep these latter alternatives in mind as expressing at least a part of Kant's meaning. We must hope to get a clearer view of what he is talking about as we discover the kind of thing he says about it. At present I can only offer a warning against two possible misconceptions.

We may say provisionally that in order to know a world of appearances given successively in time, the successively given appearances must be known by one and the same self-conscious self which remembers the past and thinks of these appearances as necessarily combined in a changing objective world. This does *not* mean that the soul must be a permanent substance contemporaneous with all our thinking. The whole aim of the Paralogisms is to prove that we can have no knowledge of the soul as a permanent substance. On that point there is no ambiguity whatever.

The second point is this. Kant's doctrine of the unity of apperception insists on the necessary unity of thought or of thinking, of an act and not of a substance; but we must not imagine that he is insisting merely on a common element which we can find in our separate and successive acts of thought. Such a common element could be discovered only by an act of thought which held before itself, and compared and distinguished, these separate and successive acts; for we can find similarities—and indeed differences—in different acts of thought, and in different objects of experience, only if our mind is capable of holding these different acts and objects before itself in one single, and (Kant believes) to some extent self-conscious, act. The act of pure apperception is not merely an act which on analysis we find to be repeated in each successive act of empirical thought and to be the source of the unity of each of such successive acts. It is essentially a synthetic act which is the condition of all analysis and of all unity found by means of analysis;¹ and Kant seems to regard it, not as a series of qualitatively identical and numerically different acts, but as one and the same act.² As such it is not merely the source of the unity of each successive empirical act, but is also the source of the unity of these acts with one another. Whatever be the difficulties, and even the errors, of his view, I have little doubt that he is trying to express an important philosophical truth.

§ 6. *Apperception as the Condition of Experience*

We must now turn back to Kant's own exposition.³ He is seeking a transcendental ground for that necessity which his provisional analysis has found in experience—a necessity

¹ Compare B 133 where the synthetic unity of apperception is the condition of the analytic unity of apperception.

² One and the same act of pure apperception is presupposed by all our empirical acts of thinking, as one and the same space and time is presupposed by all our empirical intuitions. The main difficulty is whether it can properly be considered as an act when it is considered in abstraction from all the empirical differences with which it is bound up.

³ A 107.

which I think we shall understand best if we regard it as the necessary synthetic unity of the object.¹ He assumes that what he seeks must necessarily possess numerical identity or unity;² and he assumes also—though this surely requires further argument—that such necessary numerical identity implies absence of change. Empirical apperception cannot supply us with *necessary* numerical identity, since necessity cannot be derived from empirical data, and empirical apperception is in any case subject to continuous change. The transcendental ground which we seek must be independent of experience³ and must make experience possible. Experience in turn must make this transcendental ground (or presupposition) valid.

This view accords with Kant's general account of formal conditions of experience: we should be able to find in them an internal necessity independently of experience, and at the same time we should be able to see that they are necessary as conditions of experience.⁴ If we could not see the latter necessity, they might be mere phantoms of the mind.

In accordance with these distinctions we should expect Kant to insist (1) that there must be in thinking a unity whose necessity is intelligible;⁵ and (2) that this necessary unity of thinking is, and is known to be, a necessary condition of all knowledge or experience of objects.⁶ Kant fails to make

¹ It might perhaps be described also as 'necessary reproduction', or even as 'the necessary unity of consciousness in the synthesis of the manifold of all intuitions'; but the difficulties of these statements (see Chapter XX § 7 and Chapter XXI § 1) I wish now to avoid.

² This implies identity or unity 'as regards' the different times in which it exists; see A 344 = B 402, and compare A 263 = B 319. 'As regards' seems to mean 'throughout'.

³ Kant says must 'precede' experience, but I do not think this has—it certainly ought not to have—any reference to time. It precedes experience 'objectively' (or logically), not subjectively (or psychologically); compare A 452 n. = B 480 n.

⁴ Compare Chapter VII § 4 (for space and time) and Chapter XI § 3 (for the categories).

⁵ I leave out of account for the present the question of self-consciousness, which Kant elaborates in A 108.

⁶ This must follow, if thinking is a necessary element in knowledge or experience.

this distinction with sufficient clarity, but I think it is present in his exposition.

He starts with knowledge, and insists that we can have no cognitions,¹ and no conjunction or unity of cognitions,² apart from that unity of consciousness which precedes all the data of intuition. This latter unity must be the unity of pure thinking, which Kant presumably regards as self-evident, unless he thinks he has established it in his account of conception.³ All representation (that is, all knowledge) of objects is possible only in relation to this unity.⁴

As I have already said, Kant seems to speak as if this unity were identical with 'the pure, original, unchangeable consciousness' which he calls transcendental apperception. If we ignore this complication, we may call the unity in question 'the transcendental unity of apperception'. If this unity is properly called 'transcendental', this must be because other *a priori* cognitions depend upon it. That they do so is at once clear from the fact that 'even the purest objective unity, namely, that of the *a priori* concepts (space and time)' is possible only through the relation of our pure intuitions to the unity of apperception.⁵

¹ '*Erkenntnisse*', here 'knowledges'—if we may use the word—in the full sense. ² Compare the description of knowledge in A 97.

³ Compare A 103, though it must be admitted that throughout Kant fails to distinguish sharply between thinking and knowing. See also the account of judgement in A 69 = B 94.

⁴ It would be less vague to say that this unity is a condition of, and element in, all knowledge.

⁵ The 'purest objective unity' is the unity of objects given in pure intuition, since to be objective the unity must be a unity of intuitions, and to be pure it must be a unity of pure intuitions. The objects in question can only be space and time. These are often described as concepts, though strictly speaking they ought to be described as intuitions. Kant has just said that the unity of apperception precedes all the data of intuition: he now asserts that even the purest intuitional unity, namely, that of space and time, depends on the unity of apperception. This is the transition from pure thought to pure knowledge.

I see no ground for asserting, as Vaihinger does—*Die Transcendentale Deduktion*, p. 52 = 30—that Kant could not have expressed himself in this way unless the only *a priori* concepts in which he was interested, when he wrote this passage, were space and time. The

It would be simpler to say that apart from the unity of apperception even our pure intuitions of space and time could not have that unity which is necessary if space and time are to be objects and to be known as objects.¹

The unity of apperception is therefore the necessary condition of all our knowledge of objects; for it is the condition of our *a priori* knowledge of space and time, and there can be no knowledge of objects apart from *a priori* knowledge of space and time. The unity of apperception is, however, the condition of the conceptual element in such knowledge,² as space and time are the conditions of the intuitive element in such knowledge. This is one of the most fundamental doctrines of the whole Critical Philosophy.³

§ 7. *The Unity of Nature*

So far we have been gradually mounting up to the transcendental unity of apperception. We must now descend. In our descent we no longer consider isolated objects:

introduction of space and time is essential to the argument, and concepts without an intuitional element (such as the pure categories) could not serve his purpose.

This passage should be compared with the corresponding passages about time and space in connexion with apprehension (A 99-100) and reproduction (A 101-2).

¹ Compare A 103, A 101-2, and B 160 n. Incidentally the statement shows clearly that conception as well as intuition is necessary for our knowledge of space and time; compare Chapter V § 8. To know space (or time) we must be able to recognise the common character of different spaces (or times), and this is impossible apart from the unity of thought or apperception.

² Kant says only that it is the *a priori* condition of all concepts, but the context shows that these concepts are treated as elements in knowledge. A certain obscurity attaches to the argument from the fact that space and time have just been referred to as 'concepts'—which makes the argument look like an *a fortiori* argument from the concepts of space and time to other concepts. On the other hand, I see no difficulty whatever in the statement that the unity of apperception is the condition of *all* concepts (and not merely of the categories, which Kant is reserving for treatment later).

³ See A 110, A 117 n., A 123-4, B 136, and B 144. Compare also B 150-1 and B 160-1.

what we are concerned with is the system of nature as a whole.¹

Out of *all* possible appearances which can cohere in *one* experience the transcendental unity of apperception makes,² and must make, a system of appearances in accordance with laws.³ This system of all appearances is what is commonly known as 'nature'.⁴ Kant's doctrine may be expressed by the statement that the unity of apperception is the source of the uniformity of nature.

The paradoxical character of this contention is recognised by Kant himself;⁵ but once we ascribe the necessary synthetic unity of any and every individual object to the transcendental unity of apperception, it is hardly possible to avoid ascribing the necessary synthetic unity of the whole objective world to the same source. What is really interesting is Kant's reason for coming to this conclusion; for it shows beyond any shadow of doubt that he takes the transcendental unity of apperception to involve self-consciousness.

Kant repeats his argument twice over. He says first of all that this unity of consciousness would be impossible, unless the mind, in its knowledge of the manifold, could⁶ be conscious of the identity of the *function* whereby it binds the manifold

¹ There may have been references to this before, but it is not clear whether in phrases like 'all objects'—as in A 106—Kant is using the word 'all' collectively or distributively.

² This word perhaps again suggests that 'the transcendental unity of apperception' is equivalent to 'the pure act of apperception'.

³ A 108, '*Zusammenhang nach Gesetzen*'. The laws are probably the universal laws of nature set forth in the Principles (especially the Analogies), not the particular laws which we discover by experiment and observation; see A 127–8.

⁴ Compare A 114 at end. This system may perhaps be '*natura materialiter spectata*', the totality of phenomena (*Inbegriff aller Erscheinungen*) governed by universal laws; but the word '*Zusammenhang*' suggests more readily '*natura formaliter spectata*', the uniformity or law-abidingness (*Ordnung, Regelmässigkeit, Gesetzmässigkeit*) of such a totality. Compare B 164–5, A 125, and for '*Zusammenhang*' A 2.

⁵ See A 114.

⁶ This perhaps implies that the consciousness may in some cases be 'obscure'.

together synthetically in one cognition. This is elaborated later in the statement that the mind could not possibly think, and think *a priori*, its own identity in the manifold of its ideas, unless it had before its eyes the identity of its own *act*,¹ which subjects all synthesis of apprehension (which is empirical)² to a transcendental unity, and thereby makes possible the inter-connexion³ (or system) of appearances in accordance with *a priori* rules.⁴

The main difficulty of these assertions concerns the precise meaning to be attached to the word 'function' and the word 'act'. Kant is certainly referring to a function⁵ or act of *synthesis*; but since he has spoken of synthesis as threefold, and has maintained that each of the three factors in this synthesis is both transcendental and empirical, it is not easy to be sure whether the synthesis now in question is to be identified with the whole of the threefold synthesis or only with some aspect (or aspects) of it. On the whole it is simplest to suppose that he has in mind primarily the transcendental synthesis of imagination⁶—with the proviso that since the transcendental synthesis of imagination is at once an element in, and a con-

¹ This act incidentally is the act which Vaihinger, and to an almost greater degree Kemp Smith, maintain to be for Kant unconscious and pre-conscious.

² Kant has previously said that the synthesis of apprehension may also be *a priori*; see A 99. The present statement seems due to his special concern for empirical objects. Carelessness of this kind is regrettable, but it certainly must not be taken as a denial of the doctrine that every empirical synthesis of apprehension is conditioned by a pure synthesis of time (and space). ³ '*Zusammenhang*.'

⁴ These rules are the categories. For the fuller understanding of this we must, as Kant has told us (see A 98), await his later explanation. Vaihinger is, it seems to me, *θέσιν διαφυλάττων* when he suggests—*Die transcendente Deduktion*, p. 50 = 28—that '*a priori*' should be taken with '*möglich macht*' (makes possible). Compare the *a priori* rules of synthetic unity in A 110.

⁵ 'Function' here seems to be equivalent to 'act'; for 'identity of function' seems to be equivalent to 'identity of act'—see Chapter XXIII § 6.

⁶ The 'act' of synthesis in question is explicitly opposed to the empirical synthesis of apprehension, and therefore presumably to the empirical synthesis of reproduction which is bound up with it. The latter point is further supported—though there are complications

dition of, every empirical synthesis,*consciousness of the unity of the transcendental synthesis of imagination is also consciousness of the unity of every empirical synthesis.¹

Perhaps we may put Kant's doctrine best as follows. The pure act of apperception is consciousness of the necessary unity of thought. Such consciousness is impossible apart from consciousness of the necessary unity of the transcendental synthesis of imagination whereby space and time are held together as individual objective wholes.² This transcendental synthesis is an element in, and a condition of, all empirical synthesis; and consciousness of its necessary unity is also consciousness of the necessary unity of all empirical synthesis, and so of the necessary synthetic unity (or uniformity) of the whole objective world.

Kant's final conclusion is that 'the original and necessary consciousness³ of the identity of the self is at the same time

here—by the statement that the synthesis in question is in accordance with rules which make appearances necessarily reproducible.

It may seem obvious that the *pure* act of apperception cannot involve consciousness of any *empirical* synthesis. This is true, but it can—and ultimately does—involve consciousness of the *identity* of every empirical synthesis, so far as that identity is also the identity of the transcendental synthesis. Indeed this is precisely Kant's point. Transcendental apperception, according to him, involves knowledge of the necessary synthetic unity present in any and every object *quâ* object, and consequently present in triangles and bodies, etc. The matter synthesised under this unity distinguishes one kind of object from another, and must be known, not by pure, but by empirical, apperception. Empirical apperception must know the synthesis so far as it is particular, and consequently so far as it is empirical. Transcendental apperception must know it so far as it is universal and necessary, and the unity of every empirical synthesis is necessary.

¹ Note the reference to the manifold in both Kant's statements. If the manifold is empirical the synthesis is empirical also, although there is necessarily a pure transcendental element in it. For the view I have taken, compare A 119—'the necessary unity of the *pure* synthesis of imagination in regard to *all* possible appearances'.

² Compare A 107.

³ This must be the pure act of apperception, which Kant again seems to identify by implication with the transcendental unity of apperception, the 'unity of consciousness' referred to in the previous sentence.

consciousness of an equally necessary unity of the synthesis of *all* appearances in accordance with concepts, that is, in accordance with rules'.¹ Here the pure act of apperception clearly involves consciousness of the unity, not only of the transcendental synthesis of imagination, but also of the empirical syntheses which are conditioned by the transcendental synthesis. It does so, as I have said, only because the transcendental synthesis is an element in, and a condition of, every empirical synthesis.²

Kant is anxious to show that all knowledge, and particularly knowledge by means of empirical concepts, presupposes the necessary unity of apperception, and consequently involves the imposition on all objects—through the transcendental synthesis of imagination—of necessary synthetic unity. This necessary synthetic unity makes all appearances 'necessarily reproducible'; and Kant therefore can say that concepts (or rules)—even when they are empirical—make appearances necessarily reproducible; for he has shown that all concepts presuppose the necessary unity of apperception. He can also say that these concepts determine an object for intuition, since, as we have seen, it is the presence of necessary synthetic unity in appearances

¹ Compare with this the statement in A 107 that the unity of apperception is the *a priori* condition of *all* concepts. Such a necessary unity of synthesis, it is almost unnecessary to say, involves necessary unity of the objective world.

² It may be objected that the unity of a particular kind of synthesis (and of a particular kind of object) is different from the unity of the transcendental synthesis, and that every particular kind of synthesis (and every particular kind of object) has its own special kind of unity. The unity of a triangle, for example, is different from the unity of a body; or—to take a more convenient case—the unity of a plant is different from the unity of an animal.

As I understand Kant, he would have no objection to such a statement; and such unities might be described, I think, as particular or empirical forms known only through empirical apperception—compare Chapter VI § 8. Kant is maintaining that every object must have also a universal and necessary synthetic unity (for example, it must be a substance with accidents); and that this latter unity is imposed by the transcendental synthesis of imagination and known through an act of pure apperception. What is true of the objects is also true of the syntheses, and need not be repeated.

which alone characterises them ^{*}as objects. This point he himself makes—although not too clearly; for he equates the determining of an object with the determining of ‘the concept of something in which the appearances necessarily cohere’.¹

¹ ‘*zusammenhängen*.’ Note that this concept is the concept of ‘an object in general’ which is presupposed by the empirical concepts of this and that particular kind of object. Necessity belongs to empirical concepts only so far as this ultimate concept is presupposed.

CHAPTER XXII

THE TRANSCENDENTAL OBJECT

§ 1. *Apperception and the Transcendental Object*

At this point¹ Kant gives us a summary of the present stage of the argument, a summary which is intended to clarify, and perhaps to correct, his previous statements. As he himself says, we are now in a position to determine more accurately the concept² of an object in general, the concept which was obtained by our provisional analysis of the nature of an object.³

All ideas, *quâ* ideas, have their object,⁴ and they can also be objects of other ideas.⁵ Appearances are the only objects which can be immediately given to us,⁶ and that which in an appearance relates immediately to an object is called 'intuition'.⁷ The appearances which are immediately given to us, and are in a sense objects,⁸ are not things-in-themselves. They are ideas which have in turn their own objects; and the object

¹ A 108 towards the end.

² The text has 'concepts', but this seems to be a slip. The concepts of an object in general are the categories.

³ See especially A 104-5.

⁴ This seems scarcely accurate, for the images of imagination may have no object (compare A 198 = B 243); and the need for a transcendental deduction itself arises from the fact that some concepts may have no object. In A 189 = B 234 Kant says, more plausibly, that every idea, so far as one is conscious of it, can be called an object.

⁵ This presumably refers to Kant's doctrine of judgement. Every judgement is the idea of an idea of an object (see A 68 = B 93 and Chapter XII § 5); or more simply every idea can be brought under a concept.

⁶ Compare A 190 = B 236: 'appearances are not things-in-themselves, and yet are what alone can be given to us to know'.

⁷ 'Appearance' here—compare Chapter XX § 2—seems to be the whole complex image, for example, this white house; and intuition seems to be the *sensum* which we have at each moment and which is a part of the whole appearance. For the immediate relation of the intuition to the object, see Chapter IV § 2 at the end.

⁸ The appearance considered in abstraction from the necessary unity imposed by thought is an indeterminate object or 'mere appearance'; see A 92 = B 125 and A 20 = B 34. Considered as

of which they are the ideas (or appearances) cannot itself be another appearance of the same kind; that is to say, it cannot be an empirical intuition or be known by means of empirical intuition. Kant concludes, as he did before,¹ that the object of these ideas (or appearances) must be an unknown 'something', which he here calls the non-empirical or transcendental object = x , and which he formerly called something in general = x . The 'something' to which we refer one appearance differs in no way from the 'something' to which we refer another appearance, if we consider it in abstraction from the appearance which is referred to it. Since *ex hypothesi* it cannot be known by means of intuition, it cannot be known at all, it can only be conceived or thought; and the concept of something in general², since it contains no elements derived from empirical intuition, must be a pure concept.

This concept of something in general or the transcendental object is present in, or presupposed by, all our empirical concepts³—when we judge that this is an animal, we judge that the given appearance is the appearance of 'something' which is real independently of our minds. The presence of this pure concept in all our empirical concepts alone can confer upon our ideas⁴ relation to an object, or in other words objective reality.

possessing necessary synthetic unity it is, as Kant is about to insist, the phenomenal object. Perhaps it is simplest to say that so far as we are conscious of an appearance it is an object, but this must be distinguished from the fact that it also refers to an object, or is an appearance of an object—a fact which Kant is about to explain.

¹ See A 104, where, however, the phrase 'transcendental object' was not used.

² This is the concept—it must not be forgotten—of the general character of 'something', of its 'thingness' or 'objectivity'.

³ This is the reason why, although empirical, they involve necessity.

⁴ Erdmann's emendation—'*was allen*' for '*was in allen*'—is accepted by Kemp Smith, and suggests that relation to an object is conferred upon empirical concepts. Kant, however, is trying to explain how this relation to an object can be conferred upon *ideas* or *appearances*, as is shown both by what precedes and by what follows. The original text therefore seems to me sound, and I have followed it, but it should be noted that I have supplied the words 'upon our ideas' from the context.

Since the pure concept of 'something in general' can contain no determinate intuition;¹ and since, as Kant has argued before, a 'something' which is merely something different from all our ideas is for us nothing;² the concept in question can only be the concept of that necessary synthetic unity which must be found in the given manifold of the appearance and (on his view) actually constitutes its objective reality. What we call the relation of an appearance to an object turns out on analysis to be the necessary synthetic unity of the appearance itself; and this is again identified with the necessary unity of consciousness or apperception.³ It is consequently identified also, in view of the previous argument,⁴ with the necessary unity of the synthesis of the manifold through a common function of the mind. I take this synthesis to be the transcendental synthesis of imagination, and the common function to be the power⁵ of transcendental imagination. This function is 'common' in the sense that it is manifested in the transcendental synthesis of imagination which must be present universally whenever we combine the manifold in one idea (or one object).⁶

Kant now gives us his final summary. The transcendental unity of apperception—and consequently the unity of the transcendental synthesis of imagination⁷—must be regarded as necessary *a priori*; for otherwise the cognition (presumably

¹ It is not, like empirical concepts, derived by abstraction from determinate intuitions.

² A 105.

³ Kant says that relation to an object is the necessary unity of consciousness, and this is awkward until it is explained, as I have explained it, by inserting the middle term.

⁴ See Chapter XXI § 7.

⁵ This is an irregular use of the word 'function'—see Chapter XII § 2—but compare the phrase 'transcendental function of imagination' in A 123 and also A 78 = B 103. It is perhaps possible that 'function' here means 'a formal act' (or 'the form of the act'), which as such is universal or 'common'.

⁶ Kant has in view, not any arbitrary combination, but combination into a phenomenal object—which always requires the transcendental synthesis of imagination.

⁷ Kant says 'this unity', which might refer only to the latter unity, but from what follows it appears to refer primarily to the unity of apperception.

the idea or appearance) would be without an object.¹ Hence Kant can formulate a transcendental law upon which the objective reality² of ideas or appearances depends, and apart from which they could not be ideas or appearances of an object. The simplest statement of this law is that all appearances, so far as they are appearances of an *object*, must conform to the necessary unity of apperception and to all conditions which it implies—just as all appearances, so far as they are intuitions, must conform to the forms of time and space.³

Kant's own statement is rather more complicated, and he indicates that the conditions implied by the unity of apperception are *a priori* rules of synthetic unity. These conditions or rules we must take to be the categories to which he is about to introduce us.⁴ Apart from them there could be no knowledge of objects, and indeed no objects, in the strictest sense,⁵ at all.

§ 2. *Transcendental Object and Thing-in-itself*

I have discussed this third subsection in great detail, both because of its own difficulty and because of the misconceptions to which it has given rise. It is far from being a model exposition, but nevertheless it offers us—as its title indicates—an analysis of what is involved in the synthesis of recognition in the concept.⁶ Such a synthesis alone can give us knowledge of objects, and these objects Kant finds to be characterised by a necessary synthetic unity whose origin he ascribes—as

¹ I believe that strictly we ought to see the unity of apperception as necessary in itself, and also as necessary for knowledge of an object: otherwise Kant's argument becomes circular. The same principle holds for space and time and the categories, but Kant too often fails to bring this out. In this passage the reason given spoils the argument by giving it the appearance of circularity.

² Here described, not only as 'the relation to an object', but as 'the relation to a transcendental object'.

³ Compare B 136 and B 144.

⁴ The unofficial introduction of the categories before their time tends rather to puzzle than to help the reader.

⁵ That is, no phenomenal objects.

⁶ It is obvious that the concepts employed in recognition are usually empirical, or at least particular, concepts.

on Critical principles he must—to the unity of apperception. He has still to show that the unity of apperception involves the categories, but, as I have said before, he has every right to reserve this for a separate discussion. He has also a right to expect, in view of the explicit warning previously given,¹ that we should interpret his analysis of details in the light of the argument as a whole.

It is, in my opinion, through failure to see the argument as a whole that Professor Vaihinger has been led to maintain that the present passage is irrelevant to a deduction of the categories and inconsistent with the belief that there are categories.² This theory seems to me palpably false; and I do not propose to repeat criticisms which I have already made elsewhere.³ It must, however, be noted that Professor Kemp Smith, who accepts Vaihinger's arguments and conclusions, endeavours to reinforce them by the contention that the very phrase 'transcendental object' is itself a pre-Critical or semi-Critical survival. His main ground for this contention is that the transcendental object is 'the *thing-in-itself*, conceived as being the object of our representations'.⁴

Professor Kemp Smith himself points out⁵ that even Vaihinger has not detected the un-Critical character of the transcendental object. Curiously enough, he does not observe that Vaihinger expressly denies the transcendental object to be equivalent to the thing-in-itself: it is, on the contrary, the object which we, from the nature of our minds, think into appearances; it is therefore *immanent*, and is to be sharply distinguished from the *transcendent* object, which is the thing-in-itself.⁶ A similar view, though not without qualifications, is taken by Adickes.⁷ If these views were sound, then the transcendental

¹ A 98.

² It may be observed that this extraordinary view finds no support whatever in Adickes.

³ *Proceedings of the Aristotelian Society*, Vol. XXX, vii, pp. 167 ff. (1930).

⁴ *Commentary*, p. 204.

⁵ *Ibid.*, p. 205.

⁶ *Die transcendente Deduktion*, p. 33 n. = 55 n.

⁷ *Kant und das Ding an sich*, pp. 99 ff. This work was published in 1924, and is therefore subsequent to Kemp Smith's *Commentary*.

object would be—what from its name it ought to be—an object which is thought *a priori* into the manifold because of the nature of the thinking mind.

It is surprising that Professor Kemp Smith should ignore this possibility, since the present account of the transcendental object has often been taken as explaining away the thing-in-itself.¹ For my own part I do not believe that Kant anywhere renounces the doctrine of the thing-in-itself; and since the transcendental object appears to be identified elsewhere² with the thing-in-itself, there is reason to suppose that it is so here, at least initially. On the other hand Kant's statements have, so far as I can see, nothing in the least pre-Critical about them.

Kant never ceases to hold that the phenomenal objects we know are only appearances of unknown things-in-themselves.³ On his view there are not two objects, but only one considered from different points of view: (1) the thing as it is in itself, and (2) the same thing as it appears to us.⁴ The thing-in-itself is the object which appears to us, though it never appears to us as it is in itself, but only as transformed by the nature of our understanding and sensibility. The thing as it is in itself is therefore the unknown object of which the objects known to us⁵ are the appearances. This unknown object is spoken of as affecting the mind and so causing the appearances.

We may object to this doctrine and especially to the use of the word 'cause' in a sense which implies no temporal succession; but such objections do not alter the fact that this

¹ This seems to be the view of Caird, *The Critical Philosophy of Kant*, Vol. I, pp. 365-6; compare Cohen, *Kommentar*, pp. 65-6.

² See especially A 366, and compare A 277-8 = B 333-4 and A 288 = B 344.

³ Strictly speaking, it is the matter of these objects which is an appearance of unknown things-in-themselves: their universal form—not, however, the empirical forms, which are partly determined by the matter—is contributed by the mind. Compare Chapter VI § 8.

⁴ Compare B XXVI-XXVII.

⁵ These may be called 'empirical' or 'phenomenal' objects; they are what we ordinarily call 'things'—houses and trees and so on.

and this alone is the doctrine to which Kant everywhere adheres.

The Critical doctrine may be expressed by saying that the transcendental object—as opposed to the empirical or phenomenal object—is the thing-in-itself. This does not, however, mean that we *know* things-in-themselves as transcendental objects, either by means of empirical concepts or by means of the categories¹—such a doctrine would indeed be un-Critical! Neither does it mean that the thing-in-itself is the source of that necessary synthetic unity which for us is the essential and universal characteristic of all our phenomenal objects.² Kant's contention is, on the contrary, that since the thing-in-itself is unknown, the necessary synthetic unity in question cannot be ascribed to the transcendental object

¹ I do not think Kemp Smith wishes to assert that it does mean this, but I cannot understand what he does mean except on some such interpretation—unless he is claiming as un-Critical the view that appearances are appearances of an unknown object or thing-in-itself, which seems to me equally impossible. His main point is that when the categories are distinguished from empirical concepts—at the present stage Kant is supposed to be innocent of categories—the doctrine of the transcendental object 'applies the categories to the thing in itself' (*Commentary*, p. 206). We might infer that since at the present stage empirical concepts are alleged to take the place of categories, these too must be applied by Kant to the thing-in-itself; but on this point again Kemp Smith's interpretation remains obscure. It is not even clear to me what he means by saying that this doctrine 'applies the categories to the thing in itself'. As I have said above, Kant often applies the category of cause to the relation between the unknown thing-in-itself and its appearances. If Kemp Smith means more than this, he ought to mean that we know things-in-themselves by means of the categories—a view which it is quite impossible to extract from the present passage or indeed from any other.

Kemp Smith even maintains, with all the emphasis of italics, that in the later doctrine of the transcendental object '*Not only therefore are the categories regarded as valid of things in themselves, they are also declared to have no possible application to phenomena*' (*Commentary*, p. 218). A conclusion so incredible ought to suggest reconsideration of the premises on which it is based.

² In an obscure passage Kemp Smith seems to imply that according to the present passage the contents of our representations are grounded and *unified* in the thing-in-itself (*Commentary*, p. 206).

considered as a thing-in-itself.¹ All we really *know* about appearances when we assert that they are appearances of an object is that they possess necessary synthetic unity, and this necessary synthetic unity must be explained as due to the nature of the mind. Hence our concept of the transcendental object, so far as we actually employ it in *knowing*² that appearances are appearances of an object, must be *reduced* to a concept of the necessary synthetic unity found in appearances;³ and this unity, as we have seen, is grounded upon, and even identified with, the necessary unity of consciousness. On this view the object as known, or the phenomenal object, is composed of appearances so far as they are combined in a necessary synthetic unity.⁴

There is a certain awkwardness in Kant's exposition; for the change in the meaning of the term 'transcendental object', even when the reasons for it are explained, must lead to confusion. His view becomes clearer, if we suppose him to be analysing the concept of objectivity.⁵ He first of all suggests that the concept of objectivity as applied to appearances is the concept of reference to an unknown 'something' independent of the mind. He then adds that it is the concept of reference to an unknown 'something' only in virtue of a necessary

¹ On Kant's view we could not know that a unity due to the thing-in-itself was *necessary*, even if the thing-in-itself were known.

² We may, and perhaps must, still *believe* that the phenomenal object is an appearance of a transcendental (or transcendent) object regarded as a thing-in-itself. The transcendental object thus in a sense remains the object as it is in itself (unknown to us): the empirical or phenomenal object is the same object as it appears to, and is known by, us.

³ Compare A 250-1 and Chapter LV § 3. It is in this reduced form that Vaihinger and Adickes rightly deny the transcendental object to be equivalent to the thing-in-itself. This contention is very clear in the more 'accurate' analysis of 'object' given in A 108-9, but it is already present in A 105; yet Kemp Smith's interpretation seems to ignore it entirely.

⁴ The object as a thing-in-itself or *transcendent* object is still for Kant the unknown cause (or condition) of the appearances so combined; or more exactly it is the unknown thing which appears.

⁵ The use of concrete words instead of abstract when we are speaking of concepts is apt to be misleading. Compare Chapter IX § 4.

synthetic unity, and this necessary synthetic unity must be imposed by the mind.¹ The concept of a necessary synthetic unity imposed by the mind is the only element in the concept of objectivity which can give us knowledge² when applied to appearances. We can easily understand how the reference to an unknown 'something' falls into the background: it is ultimately abandoned, not indeed by Kant, but by his successors.

The awkwardness of Kant's exposition should not be allowed to obscure the essentially Critical character of his doctrine; and I believe that his view is unaltered in the second edition,³ although the new passages inserted do not employ the phrase 'transcendental object'.⁴ So far from not recognising the phenomenal (or empirical) object in the present passage,⁵ Kant is giving us in some detail his usual account of the phenomenal object, namely, that it consists of given appearances necessarily combined in the unity of apperception.

¹ The difficulty of this is to explain why we should regard appearances as appearances of an unknown 'something' *because* they have a necessary synthetic unity imposed on them by the mind. But this difficulty is a difficulty of the Critical Philosophy as a whole, not of this particular passage; and appearances are appearances of an unknown something, not merely because they have a necessary synthetic unity imposed upon them, but because the matter thus united is *given* to sense.

² We not only conceive necessary synthetic unity, but we know that it must be found in our intuitions. We may also conceive the thing-in-itself, but we cannot know it, since we cannot intuit it (as it is in itself); compare B XXVI.

³ Compare B 130-1, B 137, and B 142.

⁴ Some of the passages excised in the second edition contain the phrase 'transcendental object'; but even if we supposed—a doubtful supposition—that one of Kant's reasons for the excision was dissatisfaction with the phrase, this could not mean, as Kemp Smith alleges, that Kant recognised the doctrine contained in these passages to be 'completely untenable' (*Commentary*, p. 219). Kant denies this explicitly in B XXXVII ff., and I believe him to be right in saying that he is only trying to explain the same doctrine in a clearer way.

⁵ Compare Kemp Smith, *Commentary*, p. 206.

CHAPTER XXIII

APPERCEPTION AND THE CATEGORIES

§ 1. *The Order of Exposition*

When Kant has finished his analysis of the different factors in the three-fold synthesis, he proceeds to introduce us to the categories.¹ In so doing he reminds us once more that his present account is to be taken as preliminary or provisional.²

The argument hitherto has led to the conclusion³ that in human experience all appearances, so far as they are appearances of an object, must conform to the *conditions* of the necessary unity of apperception. The simplest statement of Kant's further argument is that the categories are⁴ these conditions, since they are the conditions (or forms) of the thought which is necessarily present in experience. Such in essence is Kant's actual contention, but he complicates the argument in two ways: firstly, he describes the categories as conditions of *thought* before he refers⁵ to them as 'conditions of the thoroughgoing unity of self-consciousness'; and secondly he makes a fresh start at the beginning of the subsection, and describes the nature of 'experience' before he comes to the argument proper.

The description of 'experience' is, I think, best taken as one of the brief introductions which Kant, not always happily, tends to place before the different stages of his argument. We need not dispute its awkwardness, but we should not overlook the fact that it helps to clarify, and in some ways to expand, what has been already said.⁶

The whole argument is followed by the usual appendix.⁷

¹ In subsection 4 (A 110 ff.)

² '*vorläufig*.'

³ A 110; compare A 105.

⁴ Kant might equally say 'express' or 'contain'.

⁵ In A 111.

⁶ It may be observed that Adickes regards the first part of subsection 4 (A 110-11) as an earlier and self-sufficient deduction. I do not believe that the difficulties of the passage justify such a conclusion.

⁷ A 112 ff.

§ 2. *The Unity of Experience*

Kant's introduction appears to take its start from an earlier passage,¹ where it was said that 'the transcendental unity of apperception makes, out of all possible appearances which can cohere in *one* experience, a system² (or connexion) of all these ideas in accordance with laws.' We are now told that there is only *one* experience in which all sense-perceptions are represented³ as in a thoroughgoing system (or connexion) governed by law.⁴ This assertion finds a parallel in the statement that there is only one space and time in which all forms⁵ of appearance and all relations of being and not-being occur.

When Kant speaks thus of one experience in which all sense-perceptions (or appearances) are represented, we must not take him to assert the reality of an all-embracing divine experience, or to suggest that human experiences are part of such a divine experience: a divine experience, if it could be called experience, would have nothing to do with human categories or with the forms of time and space. On the other hand no individual human experience, and indeed no sum of such experiences, can give adequate knowledge of all possible appearances in the phenomenal world. We may affirm with confidence that doctrines of this type play no part in the Critical Philosophy.

It is less easy to determine the precise character of the positive doctrine which Kant's words are intended to convey. If we omit the ambiguous word 'experience', we may say that for Kant all possible appearances (so far as they are appearances of objects) are parts of one phenomenal world which fills space and time and is governed throughout by causal laws. Of such a world I, as an individual, can perceive only an

¹ A 108.

² '*Zusammenhang*.' Compare the other two uses of the word (once as a verb) on the same page. ³ '*vorgestellt*.'

⁴ A 110; compare A 123, B 139-40, A 230 = B 282, A 231-2 = B 284.

⁵ These 'forms' must be the empirical forms, the given shapes and sizes and so on, to which I refer in Chapter VI § 8.

insignificant fraction; and although with the aid of thought I can know more of this world than I can directly perceive, even so, my detailed knowledge is still confined only to a fraction of the whole. I do, however, know (according to Kant) that the whole must be governed by causal law, and that whatever is connected by causal law with the appearances actually perceived is as real as these appearances themselves, and must be capable of fitting into an experience continuous with my own.

We may perhaps interpret his view—provided we set aside anything that savours of mysticism or '*Schwärmerei*'—as affirming an ideal all-embracing experience which is, however, only possible and not actual: actual experience is the experiences of individual men. The one all-embracing experience may be regarded as an ideal expansion or completion of such actual experiences; and actual experiences may perhaps be said to be limited parts of it.

Kant's view will become in some respects clearer when we have studied the Postulates of Empirical Thought.¹ It may be objected at present that there is no justification on his premises for speaking of one experience, and even that there is no justification for speaking, as I have done, of one phenomenal world. To these objections I will return later.²

Curiously enough, Kant does not even ask how the experiences of different individual men are related to the one all-embracing experience. He mentions the fact that we speak of different experiences;³ but he takes the phrase to refer to different sense-perceptions, not to the experiences of this man and that. His point appears to be that when I talk about my experience of this house or that road, these are called experiences, not in themselves, but as parts of a whole experience, which he describes as 'one and the same universal experience'.

Here again, I should prefer to speak, not of one experience, but of one phenomenal and objective world, though it is possible that on Copernican principles Kant's terminology

¹ See Chapter § L 4.

² See Chapter XXIV § 4.

³ A 110.

is the correct one. The general tenor of Kant's view seems to me sound. It may indeed be urged that my experience of this house is an experience of an object in virtue of the necessity which binds together the different elements of the house and in virtue of the categories under which it falls; in short, it may be urged that my experience of the house is a complete experience in itself. This view seems to me to be false. My experience of this house is experience of an object only so far as I realise, however obscurely, that this house is part of one objective world. The categories by which I think this house as an object include the category of cause and effect, and indeed the category of interaction; and these categories imply that this object, like every other, has its necessary place in the one world which is the total object of my experience. This is what I take to be Kant's general meaning when he asserts that my different experiences are all part of one universal experience;¹ and his reason for using this language is doubtless the fact that he regards the objective world, not as a thing-in-itself, but as something which exists only in relation to human forms of thought and sensibility.

§ 3. *Unity in Accordance with Concepts*

Kant reasserts his position in more technical language when he says that the thoroughgoing and synthetic unity of sense-perceptions—by which I take him to mean *all* possible sense-perceptions—is the form of experience. This unity (or this form²) is identical with the synthetic unity of appearances in *accordance with concepts*;³ that is to say, it is identical with the *necessary* synthetic unity which we have found must be present when we judge objects by means of concepts.⁴

When Kant speaks of the synthetic unity of appearances

¹ Perhaps he is also excluding what is peculiar in the experience of individuals and especially the secondary qualities.

² Adickes takes the subject of this sentence to be 'experience', but this seems to me to give less good sense; for we cannot identify experience with that unity which constitutes its form.

³ Compare A 108.

⁴ Compare A 79 = B 104-5, A 101, A 104-5, A 108, A 109-10.

'in accordance with concepts', he must be taken to mean—as in subsection 3—in accordance with the empirical (or particular) concepts which we apply in our ordinary judgments.¹ He now goes on to assert expressly²—what has hitherto been implied rather than stated³—that if this synthetic unity depended merely on empirical concepts, it would not possess that necessity which on his view is essential to experience. We are told once more that such synthetic unity, if it is to be necessary, must have a transcendental ground. Unless there were in appearances a necessary synthetic unity—which as necessary must on Kantian principles have its origin in the nature of the mind—we might have a mob of appearances thronging our soul, but no experience and no knowledge of objects. Knowledge of objects depends on the *connexion* of appearances in accordance with necessary and universal laws—in particular on the fact that appearances must be appearances of permanent spatial substances interacting in accordance with the laws of cause and effect. Apart from such necessary connexion in appearances we should have, not knowledge, but intuition divorced from thought, which for us would be as good as nothing.⁴

§ 4. *Categories and Forms of Thought*

Kant then states, in one brief paragraph, what may be regarded as the essence of the Objective Deduction.

The *a priori* conditions of a possible experience in general are also conditions of the possibility of objects of experience.⁵

¹ Compare A 142 = B 181, 'a rule of unity in relation to concepts in general'. ² A 111.

³ It is, I believe, implied clearly enough in A 106, where the necessity which appears to be involved in the use of empirical concepts is said to possess a transcendental ground.

⁴ This passage seems to me to suggest that intuitional consciousness is possible apart from thought: when we assert that a thing is 'as good as nothing', we imply that it is *not* nothing. Kant is, however, capable of saying that such intuitions are 'for us nothing'—compare A 120—though this may perhaps mean that they are not objects. Compare Chapter XVI § 13.

⁵ A 111; compare A 96, A 158 = B 197, B 234, A 202 = B 247, A 213 = B 259–60.

This is a central principle of the Critical Philosophy, and on it Kant's whole argument depends.

For experience, or knowledge of objects, two things are necessary: (1) intuition and (2) thought. Space and time are pure intuitions whose content is the conditions (or forms) of the intuition necessary to experience; and so all objects must conform to space and time. Similarly the categories are pure concepts whose content is the conditions (or forms) of the thought necessary to experience;¹ and so all objects must conform to the categories. The essential character of any and every object as an *object* of experience is this conformity with the categories: its character as an object of a particular kind (such as a house or a table) is determined by the nature of intuitions given in space and time. The categories are therefore concepts of objects in general (not concepts of a particular kind of object), and they must apply to all objects, or in other words they must have objective reality; for apart from conformity to them there can be no object—in the strict sense—at all.²

This argument may seem open to the objection that although on Kant's suppositions every appearance must be given as spatial and temporal, it is a mere accident whether given appearances will conform to the categories and so possess the character without which they would not constitute an object.³ Such is not Kant's view. He is presupposing that the transcendental synthesis of imagination necessarily combines given appearances in conformity with the unity of apperception and therefore in conformity with the forms of thought in which that unity is necessarily manifested.⁴ The defect of his exposition lies in the fact that he has left us to connect the con-

¹ Note that Kant says space and time *contain* the conditions of intuitions, while he says that the categories *are* the conditions of thought. For him 'contain' (or 'express') and 'are' are interchangeable in this connexion.

² Compare A 93 = B 126.

³ This is the difficulty raised by Kant himself in A 88 = B 121 ff.

⁴ Compare A 108, where the transcendental synthesis is said to subject every synthesis of apprehension (which is empirical) to a transcendental unity.

ditions (or forms) of thought with the conditions of the unity of apperception previously mentioned. This defect he proceeds to make good in the following paragraph; and we must remember that he has already connected the unity of apperception, if not too clearly, with the transcendental synthesis of imagination. He does not adequately bring out the connexion between the forms of thought and the transcendental synthesis of imagination till he comes to the chapter on Schematism.

§ 5. *Apperception and the Categories*

The possibility, or rather the necessity, that the categories should apply to objects rests for Kant on the relation which he claims to have already established between our entire sensibility¹ (and so all possible appearances) and original apperception. All appearances must necessarily conform to the conditions of² the unity of apperception—conditions which must be identified with the categories. This statement is said to mean that appearances must be subject to ‘universal functions of synthesis’ in which the unity of apperception is necessarily manifested.³ These ‘functions of synthesis’ may be taken as equivalent to pure categories,⁴ that is, to the functions (or forms) of judgement, so far as the given manifold is determined, or synthetised, in accordance with them.⁵ On the whole

¹ A 111. This curious phrase perhaps refers to space and especially time as the necessary forms of all sensibility. In B 151–2 imagination is said to determine sensibility *a priori*, and this is equivalent to determining sense *a priori* as regards its form.

² This genitive is presumably an objective genitive; see A 105 (where conditions are said to make the unity of apperception possible). The phrase occurs also in A 110.

³ I take this to be the general sense of ‘*Identität a priori beweisen kann*’ (‘can demonstrate its identity *a priori*’).

⁴ Compare A 349 where the categories are described as ‘functions of synthetic unity’, and also A 356 where the concept of ‘substance’ is said to be used ‘only as a function of synthesis’.

⁵ Compare B 128. This may be supported by the fact that the synthesis in question is said to be ‘in accordance with concepts’; for we may take this as equivalent to ‘the synthesis of recognition in the concept’, that is, to judgement itself. But every synthesis which is a factor in experience is ‘in accordance with concepts’ so

I prefer to take them as functions (or forms) of the transcendental synthesis of imagination which conform to the pure categories and are a determining element in every empirical synthesis.¹

This general statement is followed by an illustration, which is too obscurely stated to be of much help. Kant chooses as his example of a category the concept of cause; and he says that it is a synthesis in accordance with concepts, a synthesis of what follows in the time series with other—and presumably prece ling—appearances.² It would have been more satisfactory if he had said it was a function³ of synthesis in accordance with concepts. The concepts must be empirical (or particular) concepts, such as 'fire' and 'smoke' in the judgement 'If there is fire, then it must be followed by smoke.' Here the successively given manifolds, synthetised respectively under the concepts of 'fire' and 'smoke', are also synthetised as cause and effect in accordance with the hypothetical form of judgement.⁴

that this argument is inconclusive. The phrase 'synthesis in accordance with concepts' occurs also in A 108; compare the 'synthetic unity of appearances in accordance with concepts' in A 110, and also 'a rule of unity in accordance with concepts in general' in A 142 = B 181.

¹ To take them in this way is to take them as schematised categories (or as the 'rules' of the transcendental synthesis conceived in the schematised categories).

² A 112. I should have thought the concept in question would be described better as the concept of effect (or of cause and effect). In A 90 = B 122 the concept of cause is said to *mean* a particular kind of synthesis.

³ Or that it was the concept of such a function; but Kant habitually treats the category both as a function or form of synthesis at work in knowledge and also as a concept of this function (just as he treats space both as a form of outer intuition and also as a pure intuition of this form).

⁴ The hypothetical form of judgement gives us only the relation of ground and consequent; but it is here applied to a ground which immediately precedes its consequent in time and this involves a transcendental synthesis of imagination. Perhaps Kant wishes also to indicate that the relation of cause and effect applies in virtue of the common character which is thought in the concepts of 'fire' and 'smoke'. If anything has the character which is thought in the concept of 'fire', it must be succeeded by something with the common character which is thought in the concept of 'smoke'.

Apart from such a necessary synthetic unity, which is imposed on appearances by means of the categories,¹ apperception, as we have seen, would not be able to manifest its necessary and universal unity. Appearances (or sense-perceptions) would then belong to no experience; for it is precisely such necessary synthetic unity which constitutes the essential nature or form of experience. We may put this in other words by saying that appearances (or sense-perceptions) would not be appearances (or sense-perceptions) of an object;² they would be a mere blind³ play of ideas, something less than a dream.⁴

§ 6. *The Meaning of 'Function'*

The reader may perhaps feel, as Kant himself suggests,⁵ that this long argument has done something to prepare, but little to instruct, him: it has introduced a number of theories, but it is not sufficiently clear to produce conviction. Many of Kant's statements are open to different interpretations, and between these interpretations the student has to choose on insufficient evidence. Most of the obscurity is, however, due to the absence of a clear distinction between imagination and thought. It is difficult to be sure where the work of thought is supposed to end and the work of imagination to begin; and consequently it is difficult to be sure how the work of the one is supposed to affect the work of the other. We can only say that without the synthesis of imagination thought can give us

¹ Or which, in Kant's language, has its *a priori* rule.

² Necessary synthetic unity is the essential character or form of an object of experience just as it is of experience itself.

³ The word 'blind' does not, I think, indicate an absence of consciousness, but an absence of self-consciousness and of objects; compare Chapters IV § 3 and XIII § 4.

⁴ They would be less than a dream because even our dreams are reflexions of our experience. Though the unreal objects revealed in them are not substances, and though there is no real causal connexion in dream-events, the images of dreams *seem* to be the appearances of bodies, and sometimes *seem* to be causally connected. The real causal connexions found by the psychologist in dreams are found only when the dream itself is made an object, and are not usually present to the mind of the dreamer.

⁵ A 98.

no knowledge of objects; and on the other hand that thought with its forms is the source of the ultimate principles which control the synthesis of imagination.

The obscurity of the argument may be illustrated by Kant's use of the word 'function', which has been a source of difficulty to us from the beginning.¹ I fear that I am unable to remove this obscurity, and the reader may be advised to treat this discussion, and the discussion of 'functions of synthesis' in § 7 below, as an appendix which may be omitted on a first reading. It involves a certain amount of repetition, but I think it may be useful to have a summary of the evidence on this difficult topic.

The forms of judgement have been described as functions, functions of understanding,² functions of judgement,³ functions of unity in judgements.⁴ The word 'function' is, however, not always used in this technical sense,⁵ and at times there is some doubt whether it is intended to convey this technical sense or not.⁶ Furthermore Kant does not restrict the word to thought or understanding, but speaks also of the function of transcendental imagination.⁷ Here again it is not clear whether this usage indicates some relation between the work of transcendental imagination and the forms of judgement; and when the word 'function' is used by itself, we may have no sufficient ground for deciding whether Kant has in mind the function of thought or the function of imagination.⁸

'Function', it will be remembered, was defined⁹ as 'the *unity* of the act of ordering different ideas under a common idea' (or concept). Though this definition professes to be

¹ Compare Chapter XII § 2.

² A 69 = B 94.

³ A 79 = B 105; compare B 128 and B 131.

⁴ A 69 = B 94.

⁵ In A 75 n. = B 100 n., 'function' seems to be used definitely for a 'work' or 'task'.

⁶ For example, in A 70 = B 95 'the function of thought' (which can be brought under four heads each containing three moments) may be the 'work' or 'task' of thought, but it may carry with it a suggestion of 'form'.

⁷ See A 123-4, where the word is used four times.

⁸ See, for example, 'function' in A 108.

⁹ A 68 = B 93.

general,¹ Kant seems to have in mind the unity of judgement; for judgement alone brings different individual intuitions (or objects) under a general concept or concepts.² It is difficult to connect this definition with the senses in which Kant appears to use the word. If we take 'function' to be originally the work or task proper to anything, it is used naturally enough for the *work* proper to a power such as understanding. We can see how it may come to mean the *way of working* peculiar to that power, or the way of working common to all its different acts.³ Thus the function of understanding is to judge; but the phrase 'function of understanding' seems to be used for what is common to different acts of judgement, namely their form. Hence the functions of understanding are identified with the forms of judgement.⁴ As Kant uses 'function' also for the 'form' of an activity,⁵ the forms of judgement are called 'functions of judgement'; and so the functions of understanding are identified with the functions of judgement.⁶

How is this to be connected with the view that a function is the *unity* of an act,⁷ and in particular the unity of the act of judgement? Presumably because what is common to the different acts of judgement is a kind of unity which is mani-

¹ When Kant says in A 68 = B 93 that concepts are grounded upon functions, he may mean that they are grounded on the unity of our acts of thought, and even that they are grounded on the forms of judgement.

² There is no judgement without conception; and there is also no conception without judgement, for a concept is a concept only because it is assumed to apply to different individual instances.

³ What is common to the different acts is presumably due to the way in which the power works, while differences in the acts are due to the material on which it works.

⁴ Strictly speaking, the forms of judgement should be present in all judgement.

⁵ He does not, I think, use function for the form of intuition, because intuition is passive.

⁶ I take it that 'judgement' here is not a power, but an activity.

⁷ We must keep in mind the possibility that 'function' in a more general use indicates the unity of any act whose essential character is to be one act; for example, in the phrase 'function of synthesis' (A 105) Kant may wish to indicate that every act of synthesis is essentially one act.

fested in uniting cognitions,¹ and in particular is manifested in ordering, or uniting, different ideas under a concept.²

It is this essential aspect of judgement with which Kant is concerned when he speaks of a function which gives unity to different ideas in a judgement.³ Every judgement not only unites different concepts (or cognitions⁴): it also thinks, by an act of abstraction and analysis, the common characteristics of different individual objects,⁵ and so unites these objects by means of an analytic unity.⁶

Judgement has, however, another essential aspect, and it is with this aspect that the Transcendental Deduction is concerned. The same function which gives *analytic* unity to the different individual objects referred to in a judgement also gives unity to the *mere* synthesis of different ideas in an intuition.⁷ In this way it is a source of *synthetic* unity, inasmuch as it imposes unity on that synthesis of imagination whereby given sense-impressions are combined into one intuition or one object.⁸

On Kant's view the mind could not by an act of analysis determine in judgement the characteristics common to different individual objects unless it were able by an act of synthesis to hold before itself at least one such complex individual

¹ All judgements are functions of unity (or unification) and the functions of the understanding are functions of unity in judgements; see A 69 = B 94 and compare B 141. The difficulties of these statements I have already discussed in Chapter XII § 2.

² A 68 = B 93.

³ A 79 = B 104. Here it is hard to be sure whether 'function' is used in a technical sense, whether in short it means the form (or the unity) of judgement.

⁴ According to Kant hypothetical and disjunctive judgements unite, not concepts, but judgements; see B 141.

⁵ These may be described by Kant as 'ideas' or 'intuitions'.

⁶ Compare Chapter XIII § 2 and Chapter XIV §§ 2, 5, and 6. The different forms of judgement, or *logical* functions, are the different ways in which this act is performed.

⁷ A 79 = B 104.

⁸ Compare Chapter XIV § 3. In the *Nachlass* 4629, 4631, 4635 and 4638 (XVII 614 ff.) Kant distinguishes logical and real functions, but the relation between this distinction and the one at present under consideration is not altogether clear.

object. So much seems to me obviously true. Kant, however, maintains further that the mind *imposes* upon sense-impressions that necessary synthetic unity without which there could be no objects: we do not merely *recognise* the synthetic unity of objects, for such synthetic unity cannot be given to sense, and even if it were given, it would be contingent and not necessary. By means of the transcendental synthesis of imagination mind can impose necessary synthetic unity on the pure manifold of time and space which has its origin in our sensibility alone; and consequently it can impose necessary synthetic unity on the manifold of sense-impressions which must conform to the nature of time and space. This imposition of unity would be impossible if time and space and sense-impressions were things-in-themselves; and it is determined, not by anything in the nature of pure or empirical intuitions,¹ but by the nature of judgement (which must itself be a unity and which must have unity in the objects judged).

We may ignore the further complications due to Kant's belief that different kinds of necessary synthetic unity must be imposed corresponding to the different forms or functions of judgement: this may seem obvious to him and impossible to us, but his proof of it is to be found later in the *Analytic of Principles*. It seems to me clear that, if we speak strictly, the function of judgement cannot be said itself to synthesise the manifold—it can merely give unity to the imaginative synthesis.

The question then arises whether, when Kant speaks of 'functions of synthesis', he is referring to a function of judgement or a function of imagination. If he is referring to the latter, does he wish to suggest by the phrase that the function of imagination must conform to the function of judgement? And what is the precise meaning he attaches to 'function' in this context?

¹ The character of the whole which results from this imposition of unity is partly determined by the character of the intuitions synthesised. Thus one space is different from one time; and although every object, to be one object, must for example be a substance with accidents, empirical intuitions determine whether the substance in question is a chair or a table; compare Chapter VI § 8.

§ 7. *Functions of Synthesis*

These questions are, I think, hard to answer. There is a danger of reading more into Kant than he means, but there is also a danger of making Kant's theory seem vague when he intended it to be precise.

Kant tells us¹ that we know the object when we have produced synthetic *unity* in the manifold of intuition; and he adds that this is impossible unless the intuition could have been produced by a *function* of synthesis in accordance with a rule. The rule seems to be the kind of rule which is contained in particular concepts like 'triangle' or 'body', and on the whole it seems most natural to take the 'function of synthesis' as a function of imagination. Apart from Kant's previous and subsequent use of this term there would be little ground for supposing him to mean that this synthesis is a transcendental synthesis² or one which conforms to the nature of judgement; but it is at least possible that he wishes to attribute unity to the act of synthesis in question,³ and to suggest that the unity of the object is possible only because of the unity of the synthesis.

The next appearance of the word 'function' is in a passage⁴ where the argument seems to follow roughly the same line,

¹ A 105; compare Chapter XX § 5.

² The only ground is the fact that this function is said to make the reproduction of the manifold *necessary a priori*; but this phrase is too obscure to enable us to speak with confidence.

³ The intuition is produced through the unity of the act of synthesis—there can be one intuition only because it is combined by one act of synthesis; and it is the unity of this act of synthesis which makes a concept possible. This interpretation accords also with Kant's further statement that 'this *unity of rule* determines all the manifold'. When he adds that it 'limits the manifold to conditions which make unity of apperception possible', he suggests that the unity in question is connected with the unity (and perhaps even with the forms) of judgement, and not merely with the unity of the particular rule or concept employed.

There is perhaps a bare possibility that the 'function of synthesis' is to be identified with 'the formal unity of consciousness in the synthesis of the manifold of ideas' immediately before.

⁴ A 108; compare Chapter XXI § 7.

although Kant is no longer concerned with the unity of an individual object, but with the unity of the whole objective world. The transcendental unity of apperception is said to make out of *all* possible appearances a system governed by laws. The reason given is that the unity of apperception would be impossible unless the mind, in knowing the manifold, could be conscious of the identity of the *function* by which it combines the manifold synthetically in one cognition. Consciousness of the identity of this function is later equated with consciousness of the *identity* of the mind's act; and it may perhaps also be equated with the consciousness of the necessary *unity*¹ of the synthesis of all appearances in accordance with concepts² or rules.

The interpretation of this passage is difficult. Since Kant equates 'identity of function' with 'identity of act', it looks as if function were not used technically for the 'unity of the act'.³ The association of 'function' and 'necessary unity of synthesis' should nevertheless be noted: it occurs too often to be dismissed as accidental. More important is the nature of the *act* of synthesis with which the 'function' seems to be equated. This act is definitely opposed⁴ to the synthesis of apprehension, but it must itself be an act of synthesis and, I think, an act of pure synthesis. Unless it be taken as a pure or formal act of judgement,⁵ it must be the transcendental

¹ It is possible that this necessary unity is intended to be parallel to the *system* (*Zusammenhang*) of all possible appearances or ideas in accordance with laws; but this system may rather be the result of this necessary unity, as is indeed suggested by what Kant goes on to say about the object.

² These seem to be particular concepts like 'triangle' or 'body'.

³ 'Identity of function' can hardly be taken as equivalent to 'identity of the unity of the act'. If it could be so taken, Kant would be insisting that the unity present in the successive acts was one and the same unity. Compare the numerical identity of pure apperception in A 107.

⁴ Unless indeed it is the *identity* of the act which is so opposed.

⁵ Kant speaks of apperception as a pure act (B 142) and of the categories as 'acts of pure thought' (A 57 = B 81); and it might be argued that when he speaks of 'the necessary unity of the synthesis of all appearances in accordance with concepts', he is most naturally interpreted as referring to the synthesis of *recognition*—which indeed is

synthesis of imagination;¹ and the unity of the transcendental synthesis of imagination is the necessary correlate of the unity of apperception or thought.²

In the next passage³ Kant connects the necessary unity of consciousness with the necessary unity of the synthesis of the manifold through a *common function* of the mind, a function which combines the manifold in one idea. Here 'function' may mean merely 'work' or 'task';⁴ but it is again productive of unity and consequently must be a unity itself. The fact that the function is said to be 'common' is of importance: the function of synthesis is always the same whatever be the special character of the manifold synthesised.

This common character is further emphasised in a later passage.⁵ Kant asserts that all appearances must necessarily conform to the conditions of the thorough-going unity of self-consciousness, that is, they must be subject to *universal functions* of synthesis, namely of the synthesis in accordance with concepts. Here the function of synthesis has differentiated itself into the functions of synthesis, just as the function of understanding differentiates itself into the functions of understanding (or forms of judgement). These functions are, as usual, necessary conditions and correlates of the unity of apperception, and they are universally present in all knowledge of objects. Their technical character can hardly be doubted, and the only question is whether they are to be identified

the subject of the present subsection. The same possibility meets us in a later passage (A 111-12) considered below. I do not wish summarily to set aside this possibility; but on the whole it seems to me to give a less satisfactory interpretation than the one I have adopted.

¹ It is hardly necessary to repeat that the transcendental synthesis of imagination is an element in every empirical synthesis and determines the essential nature of the empirical synthesis.

² Similarly the kinds of unity imposed by the transcendental synthesis of imagination are the necessary correlate of the kinds of unity thought in the forms of judgement. ³ A 109.

⁴ It might even be used loosely for 'power'. The German is '*durch gemeinschaftliche Funktion des Gemüts, es in einer Vorstellung zu verbinden*'. Note, however, that '*Funktionen zu urteilen*' (e.g. in B 143) is used for functions or forms of judgement. ⁵ A 111-12.

simply with the functions, or forms, of judgement (so far as these involve synthesis of the manifold) or whether they are to be identified with the corresponding functions, or forms, of the transcendental synthesis of imagination.

It might be suggested that since these universal functions are functions of a synthesis 'in accordance with concepts', the synthesis is most naturally taken as 'the synthesis of *recognition* in the concept' and the 'universal functions' as the forms of judgement. But it must be remembered that every synthesis of imagination (so far as it is a factor in experience of objects) is a synthesis 'in accordance with concepts'; and also that the pure concepts which determine the transcendental synthesis of imagination determine also thereby the empirical synthesis of imagination, which is in accordance with empirical concepts. The example which Kant gives of a synthesis in accordance with concepts is the synthesis of what follows in the time series with other—and presumably preceding—appearances.¹ Here the form of time is definitely taken into account, and consequently we are not concerned with the abstract synthesis of a manifold *in general* (which may be thought in the form of judgement): we are concerned with the transcendental synthesis of imagination, or at least with the whole synthesis of imagination of which the transcendental synthesis is at once an element and a condition. On the whole it seems most satisfactory to take the 'universal functions of synthesis' as functions of the transcendental synthesis of imagination.²

From this review of Kant's usage it looks as if the phrase

¹ A 112.

² The synthesis of the manifold *in general*—which is thought in the form of judgement (and in the forms of judgement)—is an intellectual synthesis (compare B 151, B 143, and B 131). As such it is one step farther removed from the empirical manifold than is the transcendental synthesis of imagination. Yet these two syntheses are for Kant closely connected; for if we consider the transcendental synthesis in complete abstraction from the pure manifold of time and space it becomes identical with the intellectual synthesis thought in the forms of judgement (compare B 161 ff.). The difference between the two syntheses is parallel to that between pure categories and schematised categories.

'functions of synthesis' played an important part in the argument, but its precise meaning unfortunately remains uncertain: we cannot even be sure that it has one precise meaning, nor can we see it clearly as developing different meanings related to one another in a way that we can understand. I incline to think that the word 'function' carries with it the implication of unity. Kant's general doctrine is that judgement, and indeed conception, is impossible apart from an imaginative synthesis which possesses unity, and that this unity of synthesis is the correlate of the unity of thought or apperception. The imaginative synthesis does not receive its unity from the unity of the given manifold: rather it imposes unity on the given manifold in accordance with the needs of thought. This it can do only because there is a transcendental synthesis of the pure manifold of time (and perhaps space) present as an element in, and condition of, every empirical synthesis; but whether the phrase 'function of synthesis' is intended to make any allusion to the transcendental synthesis of imagination, and still more whether it is intended to suggest any relation between different functions of the transcendental synthesis and the functions (or forms) of judgement—all this is a matter on which it seems to me impossible to arrive at any conclusion.

CHAPTER XXIV

THE AFFINITY OF APPEARANCES

§ 1. *The Affinity of Appearances*

In accordance with his usual practice Kant completes his argument by an appendix.¹ In this he argues that only by means of his Copernican revolution can we justify our belief in pure concepts of the understanding. Incidentally he explains what he means by the 'affinity'² of appearances.

If there are pure concepts of the understanding which apply necessarily and universally to all possible objects, such concepts cannot be mere generalisations from experience. Experience cannot give us necessity and universality: it may teach us, for example, that A is usually followed by B, but not that A is the cause upon which B necessarily follows as the effect. So far we have the ordinary Kantian doctrine: but the special problem which we have to consider is that law-abidingness or affinity of appearances which, according to Kant, is the objective condition of association and cannot be derived from association.³

Kant's language is not altogether clear, and he might almost be taken to identify the causal law of nature with the empirical rule of association.⁴ His aim, however, is to distinguish these two things. He believes that there could be no empirical asso-

¹ A 112 ff.

² 'Affinität' or 'Verwandtschaft'.

³ Compare Kant's criticisms of Hume in A 766-7 = B 794-5.

⁴ This identification is stressed in Kemp Smith's translation, 'this rule, as a law of nature' in A 113. I should prefer to take '*dieses*' (which is neuter) as referring, not to '*jene empirische Regel der Assoziation*' (which is feminine), but to the formulation of the causal law immediately preceding. Nevertheless Kant's language is odd and gives some colour to Kemp Smith's view. It would seem more natural to say that the empirical rule of association presupposes causal law—compare A 100—than to say, as Kant does, that causal law presupposes the empirical rule of association. Our *knowledge* of causal law does, however, presuppose the empirical law of association, since it presupposes the synthesis of reproduction.

ciation in our minds unless appearances were governed by necessary laws, and in particular by the law of causality.¹ This law-abidingness of appearances (which may be identified with their necessary synthetic unity) is called 'affinity'; and affinity is the ground of the possibility of the association of the given manifold, *so far as such a ground lies in the object*.² There must also be a subjective ground: that is to say, we must also have a power of reproduction and a tendency to associate ideas which have often followed or accompanied one another.³

The affinity of appearances might be described in more modern language as the uniformity of nature; and Kant believes that this is the presupposition, not only of empirical association, but also of all science and indeed of all experience. He maintains that it is intelligible only in the light of Critical principles. All possible appearances of objects belong, as ideas, to the total possible self-consciousness. Such self-consciousness is said to be a transcendental idea,⁴ and as such to involve a numerical identity⁵ which is certain *a priori*.⁶ This identity must enter into the synthesis of all the manifold of appearances, so far as the synthesis is to give us empirical *knowledge*.⁷ Hence the empirical synthesis of apprehension whereby we take up and combine given sense-impressions must conform to the unity of apperception and to the necessary conditions, or principles of synthesis, therein implied. This means that appearances, or phenomenal objects, must conform to these

¹ Compare Chapter XIX § 5. The law of causality is only one aspect of what Kant calls 'affinity'. ² Compare Chapter XIX § 4.

³ A 100. In Section 3 (A 115 ff.) Kant distinguishes reproduction and association, but I doubt whether this distinction is to be found in Section 2.

⁴ Compare A 107. It is presumably transcendental as the condition of synthetic *a priori* knowledge. ⁵ Compare again A 107.

⁶ The reason given for the last assertion is 'because nothing can come into *knowledge* except by means of original apperception'. In A 109 this was expressed by saying that the unity of consciousness must be regarded as necessary *a priori* 'because knowledge otherwise would be without an object'. I believe that the unity of apperception should be necessary (1) in itself and (2) as a condition of knowledge.

⁷ Compare A 108, A 109, A 110, and A 112.

necessary conditions. In other words they must be subject to necessary laws; for a law is simply the formulation of the necessary and universal conditions to which objects must conform.¹ To say this is to say that all appearances must possess a transcendental affinity, a necessary affinity which is derived from the unity of apperception and is the condition of experience.

§ 2. *Transcendental and Empirical Affinity*

It is manifest that, apart from the introduction of the word 'affinity', we have here only a summary statement of the argument which has already been expounded. Kant does not offer us a special proof of causality, such as is to be found in the second Analogy. He simply repeats his 'transcendental deduction' of the categories; and in so doing he endeavours to show that by his methods it is possible to demonstrate such universal laws as are implied in all the categories and particularly in the category of causation. His exposition has all the difficulties of the previous argument.² It does, I think,

¹ In obscure language Kant contrasts a law with a rule. A rule presumably lacks strict universality and necessity: it applies to some objects and not to others and is a generalisation from experience. I take it, however, that all rules presuppose, and are particular determinations of, these higher laws with which we are here concerned. Compare A 126, which throws some light on the present passage, and also illustrates incidentally the fact that Kant does not adhere consistently to the distinction between 'rule' and 'law'.

Note that Kant connects 'law' (*Gesetz*) with the representation of a universal condition in accordance with which a certain manifold *must* be posited (*gesetzt*)—a statement which seems to connect the root of the German word for 'law' with his own Critical theories. For the definition of a 'rule' we must substitute 'can' for 'must'. I confess that the word 'posited' always puzzles me: it seems to imply that a definite position is assigned in a common space and time and so in a common world of nature, and this can be done only in accordance with the Analogies, which are the ultimate principles or laws governing objective existence. The exact meaning of the parenthesis ('*mithin auf einerlei Art*') seems to me obscure: it suggests perhaps that a manifold as 'certain' or determinate is of a certain kind and falls under an empirical concept. Compare Chapter XXVII § 3.

² Particularly the reference to a 'total possible self-consciousness' and its 'numerical identity' in A 113.

serve to bring out one point more clearly—that by no mere accident does the synthesis of apprehension conform to the unity of apperception and the categories.¹ The ultimate principles determining the synthesis of apprehension are to be found, not in what is given, but in the nature of human understanding itself.²

Kant makes a further point in regard to affinity: he distinguishes 'transcendental' from 'empirical' affinity, and asserts that the latter is merely the consequence of the former.³

If we identify 'affinity' with synthetic unity, transcendental affinity is that necessary synthetic unity which characterises every object as such and is known *a priori*—the unity of a substance whose accidents possess quantity and quality and are determined through causal interaction with other substances. Empirical affinity is that synthetic unity which, as we learn from experience, belongs to a particular object or to objects of a particular kind—the unity of certain elements empirically perceived. Thus a lump of sugar, like every other object, must have the unity of a substance with accidents and so possesses transcendental affinity; but we know from experience that the accidents united in the substance of a lump of sugar are such qualities as being hard and white and sweet,⁴ and it is the unity of these perceived elements which constitutes its empirical affinity. The two types of affinity must be present in every object. A lump of sugar could not unite in itself the qualities of being hard and white and sweet unless it were a substance whose accidents are determined by causal law;⁵ and on the other hand it could not be a substance whose

¹ Compare also A 108 and A 121.

² It need hardly be repeated that this is possible only on the supposition that time and space are forms of human sensibility.

³ A 114.

⁴ If we wish to avoid the mention of secondary qualities, we may substitute such primary qualities as the physicist and chemist would find in a lump of sugar.

⁵ Hence even empirical affinity is necessary in the sense that it must be determined in accordance with necessary laws.

accidents are determined by causal law, unless these accidents were given, or at least could be given, to sense.

Transcendental affinity is thought in the *a priori* concept of an object in general (which differentiates itself into the categories); it is imposed by the transcendental synthesis of imagination,¹ which depends on the pure manifold of space and time but is independent of any particular experience. Empirical affinity is thought in empirical concepts, for example in the concept 'lump of sugar'; and this concept is derived from experience. The empirical concept, however, presupposes the concept of an object in general and the whole system of the categories—just as the empirical affinity of any particular object presupposes the transcendental affinity which belongs to any and every object.

The empirical affinity of an object cannot be deduced from its transcendental affinity; for in that case it would not be empirical. We do not know that sugar is hard and white and sweet until we perceive it. Nevertheless the empirical affinity is a consequence of the transcendental; for all empirical qualities, and their union in a particular object, are determined in accordance with the categories and particularly in accordance with the category of cause and effect.²

If we can assume, as Kant appears to assume, that the affinity of objects implies their relative constancy and the repetition of causal sequences,³ then the doctrine of affinity explains the objective ground for our association of ideas. Certainly we could never associate ideas, as we do, because they are ideas of qualities of the same object, unless we were

¹ In A 115–16 Kant describes the pure synthesis of imagination as the *a priori* condition of association. The reason for this may be that the pure transcendental synthesis of imagination is the ultimate source of affinity, and affinity is the objective ground of association.

² Or of interaction, which is reciprocal causation. Kant, it may be observed, always insists that although we know the causal law *a priori*, we can learn that A is the cause of B from experience alone.

³ Kant seems to have in mind association based on repeated sequences as well as association based on affinity in the narrower sense; see Chapter XIX § 4.

already aware of objects; and our knowledge of objects cannot be derived merely from this kind of association.¹ Nevertheless it appears to be theoretically possible that a world determined throughout by the categories would be wholly lacking in constancy and in repetitions.² It is perhaps also possible that a world possessed of merely empirical regularities would offer a sufficient basis for association.³ Such objections must not, however, blind us to the fact that Kant is attempting to establish transcendental affinity, not as an inference from the fact of association, but by an independent proof.

§ 3. *The Unity of Nature*

Kant recognises the paradoxical character of a doctrine which makes the uniformity and unity of nature depend on the character of human apperception.⁴ This difficulty disappears once we understand that nature, as we know it, is not a thing-in-itself, but an aggregate of appearances. On such a view the unity of nature can be derived from, or even identified with, the unity of apperception and can be known as necessary independently of experience. If on the other hand nature were an aggregate of things as they are in themselves, we might recognise a matter-of-fact unity in individual objects and suppose that a similar unity might be found in other objects; but we could never know that nature must be a unity and must be governed throughout by law.⁵ Many philosophers to-day would accept the view that we possess no such *a priori* knowledge of nature and its laws. Kant believes that to accept

¹ Similarly we could never associate ideas, as we do, because of an objective contiguity, unless we were already aware of this objective contiguity; and this awareness, according to Kant, already presupposes the law of cause and effect. Hence our knowledge of cause and effect cannot be derived merely from association by contiguity.

² Kant seems himself to recognise this possibility, though in a different connexion, in A 653 = B 681. A discussion of the doctrine of affinity in this part of his work—see especially A 657 = B 685 ff.—would take us too far from our present subject. See also Chapter XLV § 7.

³ See Chapter XIX § 5.

⁴ A 114; compare A 127.

⁵ Compare A 128 ff, B 166 ff.

this view is to cut away the foundations of science and to make the world of experience indistinguishable from the world of dreams.

§ 4. *The One All-embracing Experience*

Kant's insistence that nature is essentially the object of all possible experience,¹ and again that all possible appearances belong as ideas to the total possible self-consciousness,² raises once more the question, to which I have already alluded,³ whether Kant is entitled, on his premises, to speak of one experience or even of one phenomenal world.

Let us assume that there is a world which is real independently of our knowing, but that we know this world only as it must appear to us, and not as it is in itself. Of this world in its own inner nature we know, and can know, nothing; but we know that in relation to human minds it must appear as a world of substances interacting in time and space. The spatial and temporal world of interacting substances is the phenomenal world which we know as 'nature'. Its character as spatial and temporal is due to the nature of human sensibility; and the ultimate laws by which it is governed are due to the nature of human thought, since thought imposes universal principles of synthesis on the acts of imagination whereby we take up and combine what is given in time and space. The empirical differences of things are due to the nature of things-in-themselves; but even these empirical differences must conform to, and so be transformed by, the universal characteristics imposed by the mind. Thus it is due to something in the nature of things as they are in themselves that one body in the phenomenal world appears as a cube and another as a sphere; but if space is due to the nature of our sensibility, the something in question cannot with any justification be regarded as the shape of things as they are in themselves.⁴ Similarly it must be due to something in the nature of things

¹ A 114.

² A 113.

³ See Chapter XXIII § 2.

⁴ Compare Chapter VI § 8.

as they are in themselves that A appears as the cause of B and not of C; but since causality is imposed by the nature of the mind, we cannot with any justification regard the something in question as a causal relation holding between things as they are in themselves.

Even if we grant all this, and grant that different human beings possess powers of sensibility and thought which are identical as regards their *forms*, it may be objected that there would be, not one experience, but several similar experiences; and even that there would be not one phenomenal world, but several similar phenomenal worlds. The experiences and the worlds would be at least numerically different; for the individuals who possess these experiences and are aware of these worlds are numerically different.

I have not found in Kant any attempt to answer this type of objection, which I have touched upon already in regard to space and time.¹ I then suggested, tentatively, that there is some difficulty in supposing that when each of two men is aware of one infinite and homogeneous space (or time), the space (or time) of which one is aware is different from the space (or time) of which the other is aware. The same difficulty arises when we come to consider the phenomenal world in space and time. If the phenomenal world which I experience is precisely the same in character as the phenomenal world which you experience, are we justified in saying that there must be two numerically different phenomenal worlds, simply because you and I are numerically different persons? We should never dream of maintaining this, if the world experienced were regarded as a thing-in-itself. Are we compelled to maintain it, if the world experienced is one which exists only in relation to the human mind?

It seems to me difficult to give a confident answer to this question. If we think of different human experiences on the analogy of a series of mirrors which reflect, and by reflecting distort in precisely the same way, an independent physical world, there can be no doubt that even if all the reflexions

¹ See Chapter VIII § 7.

could be precisely the same in character,¹ they would nevertheless be numerically different. The reflexions would, however, occupy different spaces or times, and this fact might be the source of their numerical difference.²

It will no doubt be said that different human experiences also occupy different periods of time and even that they reflect the world from different points in space. But the phenomenal world of which Kant is thinking is primarily the physical world as it is known to science; and to that world the differences in the time and place of human perceptions are irrelevant.³ Kant is an empirical realist, and he believes that science is justified, from its own point of view, in treating the physical world as a thing-in-itself.⁴ But he is also a transcendental idealist, and he believes that the physical world exists only in relation to human sensibility and human thought *in general*, even when we eliminate from it those differences which depend on our individual sense-organs and the position of our bodies in space.

It is for this reason that Kant can speak of 'one and the same universal experience',⁵ and even of 'the total possible self-consciousness'⁶ to which all appearances belong. The whole phenomenal world of science is simply the content of one ideal human experience; for it is the real world, not as it is in itself, but as it must appear to all minds which share the same forms of sensibility and of thought.

There are of course as many human experiences as there are men and women; and these human experiences differ, not only numerically, but also qualitatively. But each contains within it elements of the one ideal experience, so far as each human being is able to distinguish the real world as it must appear to all human minds from the real world as it must

¹ This is not really possible, for the mirrors would either reflect reality from a different point of view, or if they reflected it from the same point of view, would do so at different times.

² Compare Kant's treatment of the Identity of Indiscernibles in A 263-4 = B 319-20, A 272 = B 328, A 281 = B 337-8.

³ Compare Chapter II § 1.

⁴ Compare A 45-6 = B 62-3.

⁵ A 110.

⁶ A 113.

appear to an individual possessing his particular sense-organs and his position in space and time. Furthermore it is possible for more and more of this ideal experience to become a part of my individual experience; for since the phenomenal world must be governed throughout by the same ultimate laws, it is possible for me to extend indefinitely my knowledge of the phenomenal world in time and space. For this reason we might perhaps say that the one ideal experience is 'obscurely' present in my experience, so far as our conscious knowledge of the phenomenal world implies further knowledge of which we are unconscious.

I cannot see that this view of the world is *ab initio* an impossible one. Many of the objections commonly brought against it presuppose the realistic assumptions which Kant is endeavouring to overthrow. It seems to me both possible, and even probable, that in science we know the world, not as it is in itself, but as it must appear to human minds. If we know the world only as it must appear to human minds, may there not still be only one phenomenal world for us to know? And may not this phenomenal world be described as essentially the object of one ideal experience in which we imperfectly share?

What is really baffling in such transcendental idealism is the complications to which it gives rise as soon as we begin to take into account secondary qualities and the differences in our individual human experiences; for these also are apparently subject to the laws of causation, and ultimately must find their place in one ideal experience and one phenomenal world. But for the present we must set these difficulties aside.

BOOK VI

THE TRANSCENDENTAL DEDUCTION
OF THE CATEGORIES

CHAPTER XXV

THE PROGRESSIVE EXPOSITION

§ 1. *The Authoritative Exposition*

It is natural to hope that the final or authoritative exposition of the Transcendental Deduction will be easy, after so much time has been spent in working out the details. This hope is doomed to disappointment. The authoritative exposition would be unintelligible without the help of the provisional exposition; but even with all the help that has been given us, it remains one of the most difficult chapters in the whole *Kritik*.

The provisional exposition has shown us that the proper starting-point for a Transcendental Deduction is the unity of apperception. In this way alone can we get a progressive, or synthetic, argument from the condition to the conditioned, and it is this type of argument which the *Kritik* professes to give.¹ But in its own method the provisional exposition is, for the most part, analytic or regressive; it moves from the conditioned to the condition, as is natural in a preparatory statement.

The authoritative exposition begins, as we should expect, with the unity of apperception, and offers us a progressive or synthetic argument.² This argument it completes by a longer exposition,³ which follows the lines of the provisional exposition pretty closely, and so helps us to understand Kant's final statement in the light of his preparatory discussion.

Kant could perhaps have made his position clearer by another method, but there is no difficulty in understanding why his final exposition falls into two parts, the first beginning with the unity of apperception, and the second beginning with sense-perception.

¹ The *Prolegomena* offers us an analytic, or regressive, argument. See *Prolog. Vorw.* and § 4 (IV 263 and 274-5) and Chapter VI § 2.

² A 116-19.

³ A 119-A 126.

As usual, there is an introduction¹ and an appendix.² This appendix is followed by a summary description of the Transcendental Deduction as a whole.³

§ 2. *The Unity of Apperception*

'We are conscious *a priori* of our own self-identity in relation to *all* ideas which can belong to our *knowledge*.'⁴

Knowledge is for Kant knowledge of objects given in intuition. He seems to believe, as Leibniz does, that intuitions may be unconscious; but if they are to mean anything to us, they must be 'taken up' into consciousness, or, in other words, they must be 'apprehended'.

At times Kant speaks as if intuition meant direct sense-perception; at other times as if intuition meant something much wider. Intuitions, he says here, may 'flow into'⁵ consciousness directly or indirectly. If we see a fire, the intuition flows into consciousness directly. If we see some burnt-out ashes, and judge that there was a fire, the intuition⁶ flows into consciousness indirectly.

For knowledge it is not enough that one intuition should be taken up into one consciousness, and another intuition into another consciousness. If an intuition is to be an idea of 'something', it must belong to one consciousness, along with *all* other ideas;⁷ or at any rate it must be capable of being combined with *all* other ideas in one consciousness.

A succession of isolated and momentary consciousnesses could never give us even knowledge of the succession of ideas, let alone knowledge of objects. If our ideas are to be ideas of

¹ A 115-16. The introduction summarises the provisional exposition and leads up to the unity of apperception. The main interest of it is the description of empirical apperception; compare Chapter XXI § 3.

² A 126-8.

³ A 128-30.

⁴ A 116.

⁵ Kemp Smith translates 'participate in', but '*einfließen*' may be connected with the technical term 'influence' (*Einfluss*). One substance 'influences' or 'flows into' another, when it causally determines the attributes of another. This word is used by analogy for the action of things-in-themselves in giving appearances to us.

⁶ Such an 'intuition' is constructed in imagination.

⁷ That is, with all other ideas which are ideas of objects.

an object, they must be present to the same consciousness. This means that if our ideas are to be ideas of an object in a world of objects,¹ they must belong, with all other ideas, to one and the same consciousness which is aware of one objective world.

Needless to say we are not at any moment consciously aware of *all* the appearances of all objects,² nor can we consciously combine the given momentary appearance with *all* other appearances. This does not alter the fact that every given appearance must be *capable* of being combined in one consciousness with all other appearances. When we regard it as the appearance of an object, we imply that it is capable of being so combined.³

§ 3. *The Unity of the Manifold*

We are conscious of self-identity in relation to all ideas, and all ideas must belong to one consciousness. These statements are, for Kant, different ways of expressing the same truth. The unity of apperception is impossible apart from the unity of the known manifold, and the unity of the known manifold is impossible apart from the unity of apperception.

If we distinguish these two unities—Kant himself speaks often as if there were only one—we must say that the unity of apperception is the source of all unity, for the manifold as given has no unity of its own. The unity of apperception is original and not derivative; it is necessary whatever be the matter given to thought. But it is not self-sufficient; for all thinking⁴ is ultimately about a matter given to thought, and this matter it unites under concepts. Hence pure apperception gives us our first principle—the transcendental principle of

¹ To be an object is to have a necessary place in the law-abiding system of nature. Through lack of this objects in dreams are not objects in the strict sense.

² Or even of any single object.

³ Kant may also be referring to appearances which are not actually given to consciousness, but have a kind of existence as related to a *possible* consciousness. See A 120 and Chapter XXVI § 2.

⁴ That is, the thinking of finite beings in general, and of man in particular.

the necessary synthetic unity of the manifold in all our ideas, and consequently in all possible intuitions.¹

Such a unity is the unity of intuitions, so far as they are intuitions of an object in a world of objects. It is obviously a synthetic unity, a unity of different intuitions, not a blank or empty unity, such as is thought in the category of that name.²

It is absolutely necessary to realise that in all this Kant is speaking of an objective unity, or of unity which exists for thought. He is not saying merely that an idea must be an idea of some mind, or even that ideas, to constitute any sort of whole, must be ideas of one and the same mind. This would be true of any image or illusion or fiction, and from this we could make no inference to the kind of unity involved; we could only say that there must be some sort of unity. What Kant is arguing is this—that if an idea is to belong to *knowledge*, or to be an idea of an *object*, it must conform to the unity of the thinking (and not merely of the imagining or sensing) mind.³ Without thought there could be for us no object; and thought must have unity in itself and in its object. It is because thought or judgement asserts connexion in the given, and does so in accordance with certain necessary forms, that we can affirm *a priori* the necessary unity of the object, and specify the forms which that necessary unity must take.

§ 4. *Empirical and Transcendental Consciousness*

The transcendental principle of necessary synthetic unity is elaborated in a very important note.⁴

¹ A 116–17. The word ‘transcendental’ shows that the synthetic unity is (1) a necessary condition of experience, and (2) due to the nature of the mind, in this case to the nature of thinking; compare Chapter XI § 3.

² See B 131 and B 114, and compare Chapter XXVIII § 4 towards the end. The unity in question is a qualitative unity like that of the theme in a play.

³ This contention rests on the analysis of ‘object’ in A 105 ff. and A 108 ff.

⁴ A 117 n. Kant often makes his most important statements in footnotes.

Kant is not stating the obvious fact that ideas exist only in consciousness, or, in his language, that they have a necessary relation to a *possible* empirical consciousness. What he is stating is that all empirical consciousness (so far as it is consciousness of objects)¹ has a necessary relation to a transcendental consciousness which is independent of any *particular* experience. This transcendental consciousness is original apperception, the consciousness of self as *thinking*.

The absolutely first principle of all our *thinking*²—and it is a synthetic principle—is this: that *all our varied empirical consciousness must be combined in one single self-consciousness*.³

Empirical consciousness is varied in the sense that it is composed of one idea after another, but I must be able to think all my successive ideas as my ideas, and this thinking must be one synthetic and potentially self-conscious act. Apart from such thinking I could not be aware of the succession of my ideas, nor could I be aware that they were ideas of one objective world. It is absolutely necessary that in my *knowledge* all consciousness should belong to one consciousness (of myself).⁴

In this place again Kant identifies the unity of consciousness in its relation to the manifold with the unity of the manifold in consciousness.⁵ As so often, the necessary synthetic unity

¹ The parenthesis I have introduced because it is implied by several phrases in the main text, and by the next sentence in the footnote 'in my *knowledge* all consciousness must belong to one consciousness'.

² This is described as 'thinking in general', which shows that it covers all thinking, whether analytic or synthetic. Compare B 131 n.

³ Kant seems to regard this as another way of stating the principle of 'the necessary synthetic unity of the manifold in all our ideas'. See § 3 above.

⁴ 'Consciousness of myself' is not consciousness of myself as an empirical individual, but of myself 'as original apperception'. Kant's language may suggest that he is stating the conditions of *my* experience, but I think he is attempting to state the conditions of experience *as such*. The self-consciousness of which he speaks is consciousness of the nature of thinking as it must be in any and every experience.

⁵ When he says 'Here then is a synthetic unity of the manifold (of consciousness)', 'of consciousness' goes, I think, with unity, not with manifold.

of consciousness and the necessary synthetic unity of the manifold are treated as the same thing.

§ 5. *Principles of the Understanding*

This necessary synthetic unity of the manifold is known *a priori*, and is the source or ground of synthetic *a priori* propositions.¹ These propositions are the 'Principles of Pure Understanding', such as the principle that every event must have a cause. They concern pure thought, for they tell us what pure thinking can affirm *a priori* in regard to all objects of experience.²

Hence this necessary synthetic unity—which may perhaps best be described as the unity of apperception, although it is, or involves, also the unity of the manifold—is for thought what space and time are for intuition. The unity of apperception may be called the ultimate form of thought, as space and time are the ultimate forms of intuition. It gives rise to synthetic *a priori* propositions which concern the pure thought involved in experience, just as space and time give rise to synthetic *a priori* propositions which concern the pure intuitions³ involved in experience.⁴

¹ For this reason the principle of necessary synthetic unity is a transcendental principle.

² This is the task of Transcendental Logic, which contains only the rules of the pure thought of an object. See A 55 = B 80. The Principles can be derived from pure thought, only because a manifold of pure intuitions conditions all our intuitions of objects.

³ Kant says 'which refer to the *form* of mere intuition'. I do not believe that '*blossen Anschauung*' can mean 'pure intuition', as Kemp Smith translates it: it must mean intuition in abstraction from thought. Kant, as usual, is careless about exact parallelism. Pure thought should be parallel to pure intuition, and the form of thought to the form of intuition, but here pure thought is made parallel to the form of intuition.

⁴ I take the one set of synthetic *a priori* propositions to be those established by Transcendental Logic, and the other set to be those established by the Transcendental Aesthetic, though it is possible that the latter set includes all mathematical propositions. It is a matter of indifference whether we say that these propositions concern the pure thought and the pure intuition involved in experience, or

§ 6. *Clear and Obscure Ideas*

Pure apperception, or transcendental consciousness, is identified with self-conscious thinking, or with the 'I think' which is implicit in all our judgements. It is even identified with the mere idea 'I'; but the idea 'I' is the idea of the self as thinking, the idea of the self 'in relation to all other *ideas*'. This idea is said to make possible the collective unity of all other ideas; it is the transcendental consciousness in which they are all necessarily combined.

Kant again points out that this idea may be 'clear'; that is, it may be separated out from our other ideas, and brought explicitly before our empirical consciousness. At other times it may be 'obscure'; that is, it may not be explicitly before empirical consciousness.¹ It does not matter whether empirical consciousness² that I am thinking is or is not present; I do not at every moment direct my attention to the fact that I am thinking, and Kant is not suggesting that I always do direct my attention to this fact. Nevertheless the fact is that I am always thinking, and must always be thinking, whenever I have knowledge of an object. All *knowledge* has a logical form imposed by thought, just as it has an intuitional form imposed by our sensibility; and the possibility of this logical form depends on the relation of knowledge to apperception *as a faculty*.³

All our experience and all our knowledge is based upon the presupposition that our thought is a unity. We need not be immediately aware of this, but we are mediately aware of it, if it is implied in all our knowledge. To make this awareness explicit to any degree is so far to become self-conscious. whether we say that they concern the form of thought and the form of intuition involved in experience.

¹ See Chapter XIX § 8.

² Note that it is the reality of the empirical consciousness—as is shown by the gender of the word '*desselben*'—and not the reality of the idea, which Kant asserts to be a matter of indifference. Kemp Smith's translation fails to make this clear.

³ I should prefer to say that it is due to thinking which is potentially self-conscious.

We are obviously self-conscious when we say 'I think that A is B', but self-consciousness is obscurely present even when we say that 'A is B'; for to say this is to assert an objective connexion, and an objective connexion is one which is distinguished (however vaguely) from a subjective connexion in our minds.

§ 7. *The Pure Synthesis of Imagination*

Hitherto we have been concerned with the transcendental unity of apperception.¹ Kant now takes a step forward, and deals with the synthesis of imagination.

The synthetic unity of the manifold, which is thought in all experience, presupposes, or includes,² a synthesis; and this synthesis—which is ascribed to imagination—must be pure or *a priori*, since the synthetic unity which it imposes is a necessary unity.

Such a pure synthesis must be a productive³ synthesis; for a reproductive synthesis depends upon conditions of experience.⁴

With this doctrine we are now familiar. The manifold is given to us successively in sense; and apart from thought, which goes beyond the moment, it has not even the unity of a succession of ideas, still less the unity of an ordered and objective world. Thought, however, cannot give unity to the

¹ It is transcendental because it is a ground of synthetic *a priori* propositions (see § 4 above) and the ultimate source of the necessary synthetic unity of the manifold given to us in intuition (see § 3 above; and compare A 107).

² A 118. The addition of the word 'includes' suggests the difficulty of marking off the work of thought from that of imagination. Compare A 108.

³ A productive synthesis is one which is independent of experience, and is concerned with time and space. See *Anthr.* § 28 (VII 167). We can, I think, afford to ignore the fact that the imagination of the artist is sometimes described as productive—see *K.d.U.* §§ 22 and 49 (V 240 and 314); and also that imagination is described as productive and empirical in apprehension (as opposed to reproduction)—see *Lose Blätter* B 12 (Reicke, Vol. I, p. 114).

⁴ This has already been discussed. See Chapter XIX § 3.

manifold except by the help of imagination. We cannot conceive a particular set of intuitions as being intuitions of a house, unless we gather them together in imagination, and so synthetise them in accordance with our concept of 'house'. This is true, both of empirical concepts like 'house', and of mathematical concepts like 'triangle'. In every case the concept at work in our judgement presupposes, or includes, a synthesis of imagination. Kant is here insisting that the same principle holds in regard to the concept of the necessary synthetic unity of all intuitions, a concept necessarily involved in all knowledge and in all experience. Just as each particular concept¹ presupposes a special kind of imaginative synthesis and a special kind of manifold synthetised, so the unity of apperception presupposes a *universal* synthesis² of every given manifold by imagination; and this synthesis must be a pure synthesis, if it is to impose a *necessary* unity.

This is what Kant means when he says that the transcendental unity of apperception is related to the pure synthesis of imagination as an *a priori* condition of the possibility of *all* combination³ of the manifold in one knowledge.⁴

Hence we have a second⁵ transcendental principle, which is a condition of the possibility of all knowledge and all experience. This principle is the principle of the *necessary unity of the pure (productive) synthesis of imagination*.⁶

¹ I use 'particular' concepts to cover empirical and mathematical concepts; they are opposed to strictly universal concepts or categories, and apply to some objects but not to all. Compare Chapter XV § 1.

² This universal synthesis has different aspects, which are thought in the separate categories.

³ It is so because every empirical synthesis is at the same time a pure synthesis; perhaps also because all empirical association presupposes the transcendental affinity which is imposed by the pure synthesis.

⁴ Pure thought cannot by itself give us *a priori* knowledge of objects apart from the transcendental synthesis of imagination.

⁵ For the first see § 3 above.

⁶ This is said to be 'prior to apperception'. This phrase illustrates the way in which Kant is prepared to call any necessary factor in a whole 'prior' to any other necessary factor in that whole.

Here, as usual, the synthesis which produces unity must itself possess unity.¹

§ 8. *Pure Synthesis and Experience*

There may seem to be a difficulty in the fact that a pure synthesis of the imagination must work with a pure manifold, whereas we have here a pure synthesis whose unity is the condition of *experience*. How can a pure synthesis determine the empirical manifold given to sense?²

It should be unnecessary at this stage to point out that it does so because space and time are, not only pure intuitions containing a pure manifold, but also the forms of all empirical intuition.³ The pure synthesis of the manifold of time and space⁴ conditions and determines every empirical synthesis of the manifold given in time and space.⁵ This is the doctrine of the Metaphysical Deduction, and has been elaborated in the provisional exposition in order to avoid excessive diffuseness here.⁶ It will be re-emphasised again and again in the chapters on Schematism and the Principles of the Understanding. The empirical manifold must conform to the synthetic unity imposed by imagination on the pure manifold of time and space; and therefore it must conform to the unity of apperception and to the categories.⁷

¹ It is possible that Kant again identifies the unity of the synthesis with the unity produced by the synthesis, and as usual we must ask ourselves whether on Copernican principles such an identification is justifiable.

² This is implied, if it is a condition of *experience*, and a condition of *all* combination of the manifold in one knowledge.

³ Kant points this out clearly in B 150-1.

⁴ The pure synthesis is in accordance with the categories, and imposes the categories on the manifold.

⁵ The empirical synthesis is in accordance with empirical concepts.

⁶ See A 98, and compare also A 115-16.

⁷ If we are to combine the manifold in one time and space, we must, for example, combine the given appearances (of such an object as a house) as accidents of a permanent substance.

§ 9. *The Transcendental Synthesis of Imagination*

There are various kinds of pure synthesis, and these have different kinds of unity. Thus the synthesis by which the mathematician constructs a triangle in pure intuition is a pure synthesis, and its unity depends on the particular concept of 'triangle'.¹ Among all these pure syntheses we must distinguish the pure synthesis which is transcendental, and has a transcendental unity.

A synthesis is transcendental when, *without regard to the differences in intuitions*, it is directed to the *a priori* combination of the manifold.²

In other words, a transcendental synthesis is not directed to produce a particular kind of unity, dependent upon the special differences of the given intuitions.³ It aims at producing that unity,⁴ or *a priori* combination, which is necessary for any object to be an object, whatever be the character of the empirical intuitions through which it is shown.

The transcendental synthesis of imagination does not make one object a house and another a ship.⁵ For these differences we depend on differences in intuition. It does make every object (whether it be a house or a ship) a substance with accidents, an extensive quantity, and so on. These are necessary forms of unity, or of combination, which must belong to everything that is known as an object in a common space and time.

¹ Compare A 78 = B 104. A synthesis is pure which synthetises a pure manifold (A 77 = B 103), and rests upon a ground of synthetic unity *a priori* (A 78 = B 104).

² A 118. Compare A 123 where the transcendental function of imagination is said to aim only at 'necessary unity' in the synthesis of the manifold. The same doctrine is found in B 151.

³ The pure syntheses of mathematics produce only a particular kind of unity, for example, the unity which belongs to triangles *quâ* triangles.

⁴ Such a unity is the counterpart or correlate of the unity of apperception.

⁵ Compare Chapter VI § 8.

§ 10. *The Transcendental Unity of the Synthesis of Imagination*

We should expect Kant to add that this synthesis of the imagination is transcendental because it is the necessary condition of all experience. We should also expect him to say that the necessary forms of combination imposed upon the given manifold by the transcendental synthesis of space and time correspond to the forms of synthesis necessarily involved in the unity of apperception; or in other words that they correspond to the forms of judgement, and so to the pure categories.

This is what he goes on to say, but for some reason he chooses to say it, not simply about the transcendental synthesis, but about the transcendental unity of the transcendental synthesis. I cannot see that he gains anything by this complication,¹ and his statement is not so clear as one could wish.

'The unity of the transcendental synthesis of imagination is called transcendental, when it is represented as necessary *a priori* in relation to the original unity of apperception.'²

Kant's doctrine is this: that the transcendental synthesis of imagination synthetises all the manifold given in time and space in accordance with the unity of apperception and the categories, as the empirical synthesis of imagination synthetises the given manifold in accordance with empirical concepts.³

The transcendental unity of the synthesis of imagination is thus subordinate to, and implied in, the original unity of apperception.⁴ Since the latter unity is transcendental, as

¹ In B 151 the transcendental synthesis of imagination is itself said to be directed to the original synthetic unity of apperception, that is, to the transcendental unity which is thought in the categories. This is, I think, a clearer and simpler statement of what Kant is saying in the present passage. Compare A 145 = B 185, which is also clear.

² A 118.

³ For the differences between these two syntheses see § 14 below.

⁴ In spite of being 'prior' to it. The fact that the unity of apperception is, as always, 'original', shows that a unity connected with it is derivative.

being the condition of the possibility of all knowledge, the former unity must also be the condition of knowledge, and so must be transcendental. In other words, the transcendental unity of the synthesis of imagination is the pure form, or condition,¹ of all possible experience, whatever be the matter given to sense.

For us, at the present stage, the connexion between the categories involved in the unity of apperception and the forms of necessary combination imposed upon the manifold by the transcendental synthesis of space and time is something which awaits further justification.² If such a connexion were established, we could obviously have *a priori* knowledge of all objects of possible experience.³

§ 11. *Apperception and the Understanding*

All that Kant has now to do is to show that the categories are necessarily involved in the unity of apperception, and give us *a priori* knowledge of objects because the transcendental synthesis of imagination is a synthesis in accordance with the categories. This he does, but in a way which seems unnecessarily elaborate.⁴ At the same time he attempts to connect apperception with understanding—a connexion which has awaited an explanation ever since this difference in terminology was introduced. Even now his explanation gives us little help.

¹ As we have seen so often, a 'form' of knowledge is equivalent to a 'condition' of knowledge.

² Perhaps if we accepted Kant's view of the forms of judgement, we could say that it is now justified in principle, and awaits justification only in detail.

³ This would be a 'formal' knowledge—a knowledge of the form, but not of the matter. See A 129–30.

⁴ When Kant's expressions seem unnecessarily elaborate, we must always, I think, ask ourselves whether a deeper insight into his meaning might not enable us to understand why he expresses himself in this elaborate way. On the other hand we cannot ignore the possibility that his expression is unnecessarily elaborate, because he has failed to see the shortest way to his goal. See *M.A.d.N. Vor.* (IV 476 n.).

'The unity of apperception in relation to the synthesis of the imagination is the understanding.'¹

The unity of apperception is in relation to² the synthesis of imagination, so far as the synthesis is in accordance with a concept; for there can be no concept apart from the unity of apperception, and every concept³ contains a rule for the imagination.

By 'understanding' I take Kant to mean understanding as a faculty of knowledge, and not merely a faculty of thought.⁴ Understanding, as a faculty of knowledge, is made possible because the faculty of thought is brought into relation with imagination and sense.⁵ We know an object, when by means of any concept we conceive, in one act of thought, the manifold as synthetised by imagination in accordance with that concept. This is the work of understanding, and such work is impossible apart from the unity of apperception.

'The same unity of apperception, in relation to the *transcendental synthesis* of imagination, is *pure understanding*.'

The unity of apperception, as we have seen,⁶ is in relation to the transcendental synthesis of imagination, because the transcendental synthesis of imagination synthetises all the manifold given in time and space in accordance with the unity of apperception.⁷

We know objects *a priori*, when, in one act of thought we conceive the manifold as necessarily combined by the transcendental synthesis of imagination⁸ in accordance with the unity of apperception. The concepts⁹ by which we thus know

¹ A 119. Compare B 134 n. I do not know why Kant identifies understanding with the *unity* of apperception, rather than with apperception itself. In A 127 he says that the unity of apperception is the rule, and the faculty of these rules is understanding.

² 'in relation to' is unnecessarily vague.

³ Compare A 106. Highly abstract concepts like 'virtue' and so on would require a special treatment in a full system of philosophy.

⁴ A 97.

⁵ A 97-8.

⁶ §§ 7 and 10 above.

⁷ And in accordance with the categories which the unity of apperception involves.

⁸ That is, combined in one common space and time.

⁹ These concepts are of course the categories.

objects *a priori* are necessarily involved in the unity of apperception itself. Hence pure understanding, as possessing in itself such concepts of objects in general, is to be identified with the unity of apperception; and, in relation to the transcendental synthesis of imagination, it is a faculty of *a priori* knowledge.¹

§ 12. *Understanding and the Categories*

The understanding therefore (so far as it is identified with the unity of apperception in relation to the transcendental synthesis of imagination) contains in itself pure *a priori* cognitions. These cognitions are cognitions of the necessary unity of the pure transcendental synthesis of imagination,² which combines all possible appearances in one time and space. As we know, such cognitions are the categories, or the pure concepts of the understanding,³ in accordance with which the transcendental synthesis of imagination is performed.⁴

It follows that the *empirical* power of human knowledge necessarily contains⁵ an understanding which is related to all objects of sense. This relation is a mediate relation, not an immediate one, for understanding is always related to its objects by means of intuition and the synthesis of intuition through imagination.⁶

¹ Apart from the transcendental synthesis of imagination pure understanding is not a faculty of *a priori* knowledge. I do not, however, like the identification of a *faculty* with the *unity* of apperception, although this is perhaps repeated in B 134 n.

² And consequently of the necessary unity imposed on the manifold by the transcendental synthesis of imagination.

³ Here also we might expect Kant to refer to the connexion between the categories and the forms of judgement, but he has no consideration for the weaknesses of human nature, and is satisfied to have shown this connexion in the Metaphysical Deduction.

⁴ It is because the transcendental synthesis is performed in accordance with the categories that the categories (or the pure *a priori* cognitions of the understanding) are said to *contain* the necessary unity of the pure synthesis.

⁵ Compare A 124-5, where Kant insists that experience in *empirical* recognition (or understanding) 'contains' concepts which make possible the formal unity of experience.

⁶ Compare A 19 = B 33 and A 67-9 = B 92-4.

Kant is insisting, though not too clearly, that empirical understanding is conditioned by pure understanding,¹ and that every judgement, whatever empirical concepts it uses, must apply the categories to objects given in intuition.

§ 13. *Understanding and Appearances*

When Kant says that understanding is related to all objects of sense, he means that understanding and objects stand in a *necessary* relation to one another. This necessary relation can be looked at from two sides.

From the side of understanding Kant means that the understanding in itself contains pure concepts or categories, by which it has a *a priori* knowledge of sensible objects. From the side of the objects he means that all the given matter of sense must conform to the categories, if it is to be an element in *experience*.

Kant's whole argument turns on the possibility of experience,² experience being always a compound of intuition and thought. Unless given intuitions or appearances can be thought, they cannot be for us intuitions of objects, and so cannot give us knowledge or experience. But if they are to be thought or judged, they must conform to the conditions or forms of judgement, and therefore to the categories. Apart from the categories there can be no experience of objects.

Pure understanding is therefore, by means of the categories which it contains in itself independently of any given matter, a formal and synthetic principle of all appearances. Appearances, if they are to be *given*, must conform to space and time as forms of intuition. If they are to be appearances of *objects*, they must conform to the categories as forms of thought,

¹ The unity of apperception, when it is related to an empirical synthesis of imagination, is always related to a pure transcendental synthesis of imagination as well. Obviously when we construct a house in imagination, starting from a given sensum, we construct time and space also.

² This was made clear even in A 93-4 = B 126, and it dominates the whole of the *Analytic*.

or as formal principles of synthesis contained in the nature of understanding itself.¹

This is the essence of the Objective Deduction, while the doctrine that there must be a transcendental synthesis of imagination in accordance with the categories is the essence of the Subjective Deduction.

§ 14. *Understanding and Imagination*

It may help to clarify Kant's doctrine, if we review the different ways in which the work of understanding or thought is related to the synthesis of imagination.

In an empirical concept² thought conceives the rule of the empirical synthesis of imagination whereby the given manifold is combined into an object such as a house; and this synthesis is partly determined by the intuitions which are given, and partly determined by the ultimate principles of synthesis which belong to the mind itself.

In a mathematical concept thought conceives the rule of the pure synthesis of imagination whereby the pure manifold of space is 'arbitrarily' combined into such an object as a triangle. In this case the synthesis is not determined by given empirical intuitions, though it must be consistent with the pure intuition of space,³ and must also be consistent with the ultimate principles of synthesis which belong to the mind itself.⁴ The character of the synthesis is, however, primarily due to a choice of the mind, which 'arbitrarily' constructs a figure in accordance with its concept of 'triangle', and not one in accordance with its concept of 'circle'.

¹ Compare B 164.

² For the differences in concepts see Chapter IX § 5.

³ For example, we cannot construct a figure enclosing space by means of two straight lines.

⁴ Some qualifications are necessary for this statement, since a mathematical triangle is only the form of an object and not strictly speaking an object itself (see B 147). Perhaps we could say that not all the ultimate principles of synthesis are at work unless there is a synthesis of the given empirical manifold as well as a synthesis of the pure homogeneous manifold of space. A mathematical triangle has quantity, but only a real triangle is a substance.

In pure concepts of the understanding¹ thought conceives the rule of the transcendental synthesis of imagination whereby the pure manifold is combined into one time and space possessing a necessary synthetic unity in accordance with which all empirical manifolds must be combined.² Here the relation between the pure concept of the understanding and the transcendental synthesis of imagination is akin to the relation between the mathematical concept and the pure synthesis whereby a mathematical figure is constructed: the concept is the main factor in determining the synthesis. The difference between the two cases is to be found in the fact that while the mathematical concept is arbitrary, the pure concept is necessarily involved in the nature of thought itself.³

If we ignore the differences between the categories—as Kant for the most part does himself in the Transcendental Deduction—thought as such, conception as such, necessarily requires synthetic unity in its object; and consequently it requires a synthesis of imagination which has a rule and so is capable of being conceived as a unity.⁴ If we had only empirical intuitions, and if empirical intuitions were things-in-themselves, this requirement of thought might not be met by reality. But since time and space consist of a pure homogeneous manifold, the imagination must be able to perform

¹ I ignore complications as regard to the difference between pure and schematised categories. These have already been indicated in Chapter XIII § 6, and will be explained more fully in the sequel; see Chapter XXXIII.

² To combine an empirical manifold into an object is to determine its place in one common space and time. We shall see later that to determine the relation of spaces and times to one another requires in turn a combination of the empirical manifold in these spaces and times.

³ We can think about objects without using mathematical concepts, but not without the categories.

⁴ Conception as such requires not only that we should by an act of analysis grasp the common characteristics of different objects (whatever these may be): it also requires that we should be able to hold together by one act of synthesis the object or objects which we seek to analyse. This is the whole burden of the Metaphysical Deduction.

a pure transcendental synthesis which satisfies the need for unity; and since time and space are also forms of our sensibility to which all empirical intuitions must conform, the transcendental synthesis of imagination must be able to impose necessary synthetic unity on the empirical manifold in accordance with the demands of thought.

It is Kant's belief that the different forms of judgement presuppose different principles of synthesis, and consequently different kinds of synthetic unity in the manifold judged; and it is also his belief that the transcendental synthesis of imagination works according to these principles, and imposes on the manifold the different kinds of necessary synthetic unity required. The correspondence between the categories as principles of synthesis and the forms of judgement 'leaps to the eye';¹ but Kant has yet to give us the details which alone can explain the alleged correspondence and justify his belief in regard to the transcendental synthesis of imagination. The Transcendental Deduction establishes only the general possibility of his view. The details are reserved for the *Analytic of Principles*.

This doctrine, so far as I can see, does not really depend on the view that the mind has separate faculties of understanding and imagination. Its essence is to be found in the contention that one and the same mind performs two different, but related, acts²—the act of imaginative synthesis and the act of conceiving the principle at work in the imaginative synthesis. It is easy enough to see that the second act may properly be described as an act of self-consciousness or apperception.

¹ See B 111-12.

² Or two different aspects of what is essentially one act. Certainly we must not suppose that there are two acts such that one precedes the other in time.

CHAPTER XXVI

THE REGRESSIVE EXPOSITION

§ 1. *The Regressive Exposition*

The Transcendental Deduction has now been completed, since we have established the fact that appearances¹ and the understanding are necessarily related, or connected, by means of the categories.

Our proof, however, has not that pellucid character which secures easy conviction, and Kant proposes to make this necessary relation or connexion still more clear, to lay it before our very eyes. He will begin with the lowest element in experience, sense-perception, and will gradually mount up to the unity of apperception.² In this way we shall be able more easily to interpret his account in the light of the provisional exposition, which follows the same order. We shall also be able to do more justice to the empirical elements in experience, which have, very properly, played little part in his synthetic or progressive proof, a proof concerned primarily with the transcendental use of imagination and apperception.³

§ 2. *Given Appearances*

The first thing that is given to us is appearance, and when this is combined with consciousness, it is called sense-perception.⁴

¹ That is, appearances as data for a possible *experience*. See A 119.

² It should be unnecessary to repeat the warning that Kant is offering us an analysis of the different factors and elements in experience, not an account of the way in which experience develops out of something that is not experience.

³ Compare A 94-5. This passage also explains, I think, why Kant says so little about time and space in the authoritative exposition—they are supposed to have been adequately treated in the Aesthetic.

⁴ A 120, '*Wahrnehmung*' or '*perceptio*'; compare A 320 = B 376. Sense-perception is said to be an idea accompanied by sensation (B 147); and again to be empirical consciousness, that is, consciousness in which sensation is present (B 207); and again to be empirical

Appearance in the first instance would seem to be what is to-day called a *sensum*, while sense-perception is the whole state of mind of which the *sensum* is the content.¹ Appearance is also used in a much wider sense by Kant to cover an 'image', such as the image of a house;² and he seems to use the word 'impression'³ (though not very often) for what we call a *sensum* or even for the elements into which a *sensum* can be analysed.

Kant does not believe that appearances exist apart from consciousness.⁴ Nevertheless they are not made by, but given to, the mind, which must take them up into its own activity, if we are to be conscious of them. They have no objective reality in themselves, they exist only in knowledge, and apart from the mind they are nothing at all.⁵

Kant puts this point by saying that appearances must be related to a consciousness which is at least *possible*. Would it not be simpler to say that they exist only for *actual* consciousness?

I think the reason for Kant's expression is this. The appearance given to us at any moment is something very poor and thin, which implies other appearances beyond itself. We see the appearance of the front of a house, but we think

consciousness of intuition as appearance (B 160). See also A 115, where sense is said to represent appearances empirically in sense-perception.

¹ Kant's terminology is not always consistent, and 'sense-perception' is sometimes equivalent to '*sensum*'. We may note that a sense-perception considered in relation to the subject, as a modification of a state of mind, is a sensation (*Empfindung*); considered as relating immediately to an object it is an intuition (*Anschauung*). See A 320 = B 376-7, where, oddly enough, an objective perception is equated with '*cognitio*' and is said to be either an intuition or a concept.

² Such an 'image' is not opposed to an object: it may be, and often is, an object—but not apart from thought.

³ '*Eindruck*.' For this terminology see Chapter XIX § 2, especially footnote on page 362.

⁴ He believes, like Leibniz, in *petites perceptions* which are unconscious in a sense, but even these do not exist apart from consciousness.

⁵ Kant's language is ambiguous, but I do not think he can here mean merely that apart from the mind appearances would not be appearances of *objects*.

that the sides and back of the house could also appear to us. None of these appearances has any reality apart from human minds, but they are all equally real for human minds. We can pass by means of the Analogies, and especially by the law of cause and effect, from our actual sense-perception to other possible sense-perceptions, and the possible sense-perceptions which are thus connected with our immediate sense-perception are also real. In this way appearances may have a kind of existence as related to a *possible* consciousness.¹

§ 3. *The Synthesis of Apprehension*

Sensa or impressions must be 'taken up' into the activity of the imagination, or in other words they must be 'apprehended'. Apprehension is an act which is exercised immediately or directly² upon such sensa or impressions.³

Apprehension is certainly the work of imagination, but Kant does not make it clear whether apprehension is an element in a whole synthesis which may be described as reproductive, or whether apprehension is the whole synthesis in which reproduction is an element. The latter interpretation seems the more probable.⁴ In any case there is only one synthesis of imagination, in which both apprehension and reproduction play their part, and the name by which we describe this synthesis does not greatly matter.

What is given to us by sense is always a manifold, but it has to be *combined* by the activity of imagination, and represented

¹ See the Second Postulate, A 225-6 = B 272-4. Sense-perception is there said to be sensation of which one is conscious, but a thing may be actual, though it is not *immediately* perceived. Compare A 493 = B 521.

² A 120; compare A 99 and Chapter XIX § 2.

³ Kant himself says 'sense-perceptions', but the following sentence shows that these are meant to be equivalent to 'sensa' or 'impressions'. In A 99 the synthesis of apprehension was exercised directly upon 'intuition'. This loose use of language makes Kant very difficult, but to correct his terminology would be an almost impossible task, and we must be content to grasp his general meaning.

⁴ Compare Chapter XIX § 2.

as *a* manifold. The manifold given to sense has no unity or combination in itself, and it must be combined into a whole which, at this stage, Kant describes as a picture or image.¹

By 'image' Kant seems to mean, not something simple, like a red colour (which, I take it, would to-day be called a *sensum*), but something more elaborate, like the image of a house.²

Kant's contention would obviously be more questionable, if the image were a red colour; though the fact that it takes some time even to see one colour might be urged in his support. If the image is more elaborate, like the image of a house, the presence of an imaginative synthesis seems to me undeniable.³

§ 4. *The Synthesis of Reproduction*

A mere 'taking up' of one impression or *sensum* after another would not by itself produce an image or a connexion⁴ of impressions. For this reproduction is necessary.⁵ We must therefore have a reproductive power of imagination which is able to reinstate earlier sense-perceptions beside later ones, and

¹ Compare A 99. There is a play upon '*Bild*' (an image) and '*Einbildungskraft*' (imagination).

² Compare 'images of objects' in A 120 n. When Kant says that every 'appearance' contains a manifold, and therefore different 'sense-perceptions' occur in the mind in isolation, it looks as if 'appearance' were not a mere *sensum*, but an appearance such as a house, which is its commoner meaning. It also looks as if the 'sense-perceptions' were *sensa* or impressions (or states of mind containing only *sensa* or impressions).

³ In a note Kant adds that imagination is an ingredient in sense-perception (in spite of the fact that it is exercised on sense-perception); but sense-perception here involves awareness of an image, such as that of a house. Compare B 162 where he says that the empirical intuition of a *house* is made into a *sense-perception* by *apprehension*.

⁴ '*Zusammenhang*.' This word suggests that an 'image' is something more than a simple colour.

⁵ Compare A 102. Curiously enough, Kant does not here use the phrase 'synthesis of apprehension' or 'synthesis of reproduction'; but in A 120 he speaks of imagination as a 'power of synthesis' (compare also A 120 n.), and the doctrine is the same as that of the provisional exposition.

so to exhibit a whole series of sense-perceptions.¹ In that case the reproductive power of imagination is said to be empirical.

It is obvious that this reproductive power of imagination works by rule,² and indeed that it must do so, if it can help us to know objects. We do not reproduce past ideas at random, but any given idea recalls certain other ideas by rules, for example by contiguity or similarity. These rules are subjective, they belong to the nature of the mind, although they would not be possible unless given ideas were contiguous and similar. The subjective and empirical *ground* of reproduction in accordance with such rules is therefore called the *association of ideas*.³

Unfortunately Kant does not state what the laws of association are, nor does he give us examples of what he means.⁴ All the laws of association no doubt help our thinking (though they sometimes also disturb it). The law of contiguity, for example, helps us to think of causes and effects, and this is one of the laws that Kant probably has in mind.⁵ I cannot help suspecting that he has in mind also, and perhaps even primarily, the law of reproduction by affinity,⁶ the outstanding

¹ I say 'sense-perceptions' rather than 'impressions', because Kant does so, but I doubt whether there is any real distinction intended here (unless Kant means that the whole state of consciousness is reproduced).

² Kant says 'by a rule', yet there are several rules or laws of association, and in the next sentence he himself speaks of 'rules'.

³ The association of ideas is usually the name given to the laws governing reproduction, but here it seems to be used for the natural tendency of the mind which is described in these laws.

⁴ The examples given in A 102 are all too special, because they are concerned with a pure synthesis.

⁵ See *Anthr.* § 31 B (VII 176) and compare Chapter XIX § 4.

⁶ See *Anthr.* § 31 C (VII 176) and compare Chapter XIX § 5. Affinity is itself the objective ground of association, but our tendency to associate ideas because of their affinity is subjective and empirical. It should, however, be noted that when we speak of association by affinity, 'affinity' is used in a narrower sense; for it refers to association because of the coherence of qualities in one object, whereas affinity as the objective ground of association is presumably the objective ground of all association.

example of which is to be found when we associate ideas because they are all ideas of the same object. In any case he is, I think, certainly concerned with something more than a simple image like the colour red.

§ 5. *Transcendental Affinity*

For purposes of reproduction we require not only a subjective ground, or a natural tendency in the mind; we require also an objective ground, or a ground in the object.¹ This objective ground is called the 'affinity' of appearances.²

It is obvious enough that there must be some regularity or repetition in the succession of given impressions, if there is to be any association by contiguity.³ It is also obvious that if there is to be association by affinity (that is, because ideas are derived from a common ground, and more especially from a common object), then there must be some coherence and consistency in the given qualities of objects.⁴ Without such regularity and coherence our power of association could never be exercised,⁵ and apart from the exercise of this power there could certainly never be knowledge. We could never even be aware of the succession of sense-impressions, for such awareness itself is impossible apart from reproduction and recognition (or memory).

From the fact that our ideas are associated in accordance

¹ A 121.

² A 122. Compare also A 113 where affinity is said to be the ground of the possibility of association, *so far as it lies in the object*.

³ This is the work of associative imagination, which connects ideas in time. See Chapter XIX § 4.

⁴ Compare the example of cinnabar in A 100.

⁵ Similarly if no given *sensa* were like one another, there could be no association by similarity. In this Kant seems to be less interested, but there must be similarity in objects, if there are repetitions in the successions of given impressions. I feel some doubt whether transcendental affinity could, even on Kant's own premises, necessarily imply constancy in objects and the repetition of causal sequences, and the same doubt applies to similarity in objects; see Chapters XXIV § 2 (at the end) and XIX § 5.

with certain empirical laws¹ we could infer only that there must be *some* regularity and *some* coherence in given impressions.² We could never infer that this regularity and coherence must be a necessary regularity and coherence.³

Kant believes that the regularity and coherence in given impressions is *universal* and *necessary*. It is no accident that appearances are given in such a way as to fit into a system of human knowledge. This he establishes, not by arguing fallaciously from the empirical facts of association, but by arguing from the unity of apperception, which is the ultimate condition of human knowledge.⁴ The unity of apperception is impossible apart from the necessary synthetic unity of appearances.⁵ This necessary synthetic unity of appearances is identical⁶ with what Kant calls their transcendental affinity;⁷ and he assumes that it implies a necessary regularity and coherence manifested in repeated causal successions and in the relative constancy of objects.

If given appearances were things-in-themselves, or even if their succession were due to real changes of things-in-themselves in a real time, this argument, as Kant himself recognises, would be quite unjustifiable.⁸ The argument holds, according to him, only because appearances are essentially dependent upon human sensibility, and because the time in which they succeed one another is a form under which human beings must intuit reality.

¹ The most important of these are the laws of association by similarity, by contiguity, and by affinity.

² The inference seems hardly necessary, since we know this fact by experience, an experience, however, which would be impossible but for the fact of association.

³ See Chapter XIX § 5.

⁴ In the provisional exposition Kant argued this first of all from the transcendental synthesis of imagination (A 101-2), and only later from the unity of apperception. See especially A 113.

⁵ A 116-17. Compare A 105 and A 106-7.

⁶ The necessary synthetic unity involved in the unity of apperception may indeed be taken in abstraction from time, but when it is taken as realised in time, then it is identical with transcendental affinity.

⁷ A 114. It is transcendental because it is necessary *a priori*, and is the condition of all experience.

⁸ A 101 and A 113-14.

On these suppositions the affinity of appearances, or the objective ground which makes association of ideas possible, rests upon the principle of the unity of apperception. All appearances, if they are to be elements in my knowledge, must come into the mind, or be apprehended, in such a way that they agree with the unity of apperception. This could not happen without synthetic unity in their combination, which is therefore objectively necessary, that is, necessary if we are to have any experience of objects.¹

Kant's argument is difficult enough in any case, but if we approach it with realist presuppositions, it is bound to seem absurd and even nonsensical.²

§ 6. *The Transcendental Synthesis of Imagination*

All empirical consciousness, if it is to be consciousness of objects, must be united in one transcendental consciousness, that is, in original apperception.³ This principle is the necessary condition of all possible *sense-perception* as an element in experience.

Kant's argument rests upon the doctrine that unless this were so, there could be no experience of objects, no knowledge, and no thought. There could only be a succession of unrelated sense-perceptions, which we could not even know to be a succession.

This argument he proceeds to strengthen by an account of the subjective machinery by which this necessary unity is imposed upon sense-perceptions.⁴

The transcendental affinity of all appearances, whatever be their position in our common space and time, is, Kant main-

¹ A 122. Because there can be no experience of objects apart from the unity of apperception.

² A 114.

³ See A 123 and A 117 n.

⁴ With this we pass to the subjective side of the Deduction, as is necessary to complete the argument. From the unity of apperception we can argue that if we are to have knowledge of objects, all the manifold must conform to the pure categories; but we cannot understand from this alone why the conformity of the manifold should be more than a mere accident.

tains, a necessary consequence of a transcendental synthesis of imagination. This is the transcendental synthesis of space and time, which is grounded *a priori* upon rules, that is, upon the categories.¹ The transcendental synthesis of imagination imposes upon all appearances, not only extensive quantity, but also necessary regularity and coherence.²

'Necessary regularity and coherence', or 'transcendental affinity', may perhaps still seem terms too wide to be clearly understood. They cover, I think, all the necessary laws of appearances, discussed in the Principles, and especially in the Analogies. For the sake of clearness, we may take one particular example from the law of cause and effect. Kant believes that the laying of a heavy ball on a soft cushion will always be followed by a depression in the cushion (other circumstances being unchanged);³ and that this necessary succession, or causal connexion, is due, not to changes in things-in-themselves, but to the transcendental synthesis of imagination, which imposes the causal law upon all succession of appearances. The transcendental synthesis does not make the depression the effect of the ball, but it makes every event the effect of *some* cause, and the cause of *some* effect, in accordance with a rule. Whether we like it or not, I do not think it can be doubted that this is what his doctrine is.

§ 7. *Transcendental Imagination and Experience*

Imagination has, on this view, a transcendental, as well as an empirical, use.⁴ It is a power of *a priori*, as well as of empirical, synthesis, and as such it may be called productive⁵ imagination.

¹ A 123; compare A 125.

² I need hardly repeat again that the reason why the transcendental synthesis of imagination can (1) be grounded upon the categories and (2) can impose categorial principles of synthesis upon the given manifold is that it is a synthesis of a pure manifold given in the nature of our sensibility and conditioning all empirical sensation.

³ A 203 = B 248.

⁴ A 94; compare Chapters XVII § 9 and XI § 4.

⁵ A 123. Note that the word 'productive' is here restricted to imagination manifested in an *a priori* synthesis, that is, in a synthesis independent of experience; compare Chapter XXV § 7.

Productive imagination might, however, have a special use in the pure synthesis of mathematics, and we must distinguish the transcendental synthesis from these pure syntheses.¹ The synthesis of imagination is transcendental, so far as it aims, not at the construction of a *particular* figure in accordance with a *particular* concept, but at that *necessary synthetic unity* in all the manifold of appearances without which they could not be appearances of objects.²

However paradoxical it may seem, Kant believes that the transcendental synthesis³ of imagination is the source of the affinity of appearances, and therefore of the association and reproduction of appearances in accordance with laws,⁴ and therefore of the possibility of experience itself. Without such a transcendental synthesis no concepts of objects would come together into one experience.⁵

¹ The transcendental synthesis is of course present in these pure syntheses, as it is in every empirical synthesis. Compare Chapter XXV § 14.

² A 123. Compare A 118 and Chapter XXV § 9. Kant seems to speak here as if the imagination itself (so far as it is a power of *a priori* synthesis directed to necessary unity) were the transcendental *function* of imagination; compare A 78 = B 103. This seems to me due to carelessness in language; but perhaps the word '*diese*' (this) can be taken as referring loosely, not to imagination, but to the *a priori* synthesis itself, which can properly be described as a transcendental function of imagination.

³ Kant says 'function', but I do not see that anything is added by this terminology, unless perhaps it is intended to suggest that the transcendental synthesis is formal and is related to the forms or functions of judgement; see Chapter XXIII §§ 6-7.

⁴ Kant seems sharply to distinguish 'reproduction in accordance with laws' both from affinity and from association. Perhaps 'association' is here meant strictly for the subjective ground, the tendency in our minds, on which reproduction rests (A 121). This is not, however, very satisfactory, since affinity is the ground, not of our subjective tendency, but of its successful exercise. 'Reproduction according to laws' looks a little like the 'necessary reproduction' which is so puzzling in A 105-6 (see Chapter XX § 7). Perhaps 'laws' is here equivalent only to 'empirical rules', but compare 'universal rules of a thorough-going connexion in reproduction' in A 122.

⁵ All particular concepts (including all empirical concepts) depend upon the universal transcendental synthesis which is involved in the

§ 8. *Transcendental Imagination and Apperception*

The proof of transcendental affinity rests on the contention that transcendental affinity is necessary for, and is implied in, the unity of apperception, and that the subjective activity by which transcendental affinity is realised is the transcendental synthesis of imagination. The connexion between the unity of apperception and the transcendental synthesis of imagination obviously requires further explanation, and this Kant now offers us, although not in a very adequate way. At the same time he stresses again the fundamental importance of the unity of apperception, and the parallel between it and time.¹ In our concern with imagination we must not forget that the unity of apperception is the ultimate ground of all our knowledge.

The unity of apperception, the constant and unchanging 'I'² is the correlate of all our ideas, so far as it is possible³ for us to become aware of them, that is, to be aware of them as ideas of something.⁴ All empirical consciousness belongs to one all-comprehensive pure apperception, as all sensuous

particular synthesis corresponding to the particular concept. Hence Kant may be referring to particular concepts as well as to categories, but he may have in mind only the categories.

¹ A 123-4. This makes what looks like a momentary break in the argument, and enables Vaihinger to maintain that we have here the beginning of one of the substrata into which he arbitrarily divides this argument. In view of my conclusions in regard to his main strata, I do not think that these alleged substrata require any further discussion. The suggestion of Adickes—that this paragraph connects more easily with the first paragraph of A 123 than with the intervening paragraph on imagination, and consequently that the paragraph on imagination is a later insertion—has more plausibility. Even if this is true, the paragraph on imagination is necessary to the argument.

² This does not imply that the soul is a permanent substance.

³ This may be a reference to the fact that ideas exist only in relation to a *possible* consciousness. See A 120 and § 2 above.

⁴ I introduce the last clause from A 116, where Kant adds the necessary parenthesis to the statement that the unity of apperception is the condition of the possibility of all ideas (*because they are ideas of something only through the fact that they belong with all others to one consciousness*).

intuition (considered as an idea) belongs to the pure intuition¹ of time.² This has already been stressed in many places.³

We have seen that the transcendental synthesis of imagination works in conformity with the unity of apperception and so produces necessary synthetic unity in the manifold in accordance with the categories. We have now to add that pure apperception must bring the transcendental synthesis to concepts⁴ and so make explicit the principles by which the transcendental synthesis of imagination is guided and controlled.⁵ In other words it must make intellectual what in itself is sensuous⁶; for the synthesis of imagination is always sensuous, even when it is a pure synthesis as in the construction of a mathematical figure.⁷

This doctrine is now familiar to us, both as regards the categories and as regards particular concepts.⁸ Imagination by itself could give us only pictures or images, but because one and the same understanding is able to conceive the various principles upon which imagination synthetises the given manifold, the concepts of the understanding are able to give

¹ Kant calls it a pure *inner* intuition; usually it is the *form* of inner intuition.

² Here, as so often, Kant makes time parallel to the unity of apperception, without stating (1) that only through the unity of apperception is time one, and (2) that only through time, and the transcendental synthesis of time, is the unity of apperception the ultimate principle of the unity of the manifold in consciousness. Compare A 98-9, A 107, B 151, and A 138-9 = B 177-8.

³ See A 107, A 110, and A 117 n., and compare A 127-8, B 136, and B 144.

⁴ Compare A 78 = B 104.

⁵ It may be objected that this is the task of Transcendental Logic; but Transcendental Logic is for Kant carrying out more systematically the work of ordinary thought. Whenever, for example, we use the category of cause and effect, we are making explicit a principle by which, even if we are unaware of it, the transcendental synthesis of imagination is controlled. Compare Chapter XIII § 5.

⁶ A 124. Compare B 151.

⁷ Imagination is concerned with synthetising intuitions, not with conceiving the principle by which it is itself guided.

⁸ See Chapter XIII §§ 5-6, Chapter XX § 5, and Chapter XXV § 14.

us knowledge of objects.¹ This doctrine may be compared with what Kant previously called the synthesis of recognition.

For an explanation of how the transcendental synthesis of space and time is controlled by the categories we must await the chapter on Schematism. Kant at present is dealing only with the most general character of the relation between the unity of apperception and the transcendental synthesis of imagination. Imagination is the connecting link between understanding and sensibility, and by its transcendental synthesis it connects the manifold of intuition with the unity of apperception; for it imposes upon the manifold that necessary synthetic unity without which the unity of apperception would be impossible. Sensibility by itself could give us only *appearances*, but never *objects* of empirical knowledge, and therefore it could never give us *experience*.²

§ 9. *The Categories*

In all this exposition 'from below up'³ Kant has deliberately kept the categories in the background, just as he did in the provisional exposition. He now gives a summary review of the argument, with a manifest allusion to the account of the threefold synthesis, and suddenly presents us with the categories.⁴

¹ Here, as so often, it is not absolutely certain whether Kant is talking only of the categories or of all concepts (including the categories). The fact that they 'belong to the understanding' suggests the categories (although all concepts belong in a sense to the understanding); and I think this is on the whole supported by the general context. The previous mention of concepts, at the end of A 123, is also ambiguous, and the same ambiguity is found in A 125. It is unfortunate that Kant does not use a special word, such as 'notion', when he means categories as opposed to particular concepts. See A 320 = B 377.

² A 124. This is an admirably clear statement of the essentially Critical doctrine which is stated more ambiguously in A 89 = B 122, and in A 90 = B 123. See Chapter XVI § 8.

³ A 119.

⁴ In the first edition the categories always appear in the Deduction as if they were intended to be a dramatic surprise, following necessarily, but unexpectedly, from what has gone before. (See A 111, A 119, and the present passage.) Kant sometimes treats the unity of apper-

Experience consists in apprehension, association or reproduction,¹ and recognition, of appearances. These are empirical, although apprehension is conditioned by time, reproduction is conditioned by the transcendental synthesis of imagination, and recognition, or empirical apperception, is conditioned by pure apperception.² The last and the highest of these, empirical recognition, contains *concepts*, which make possible the formal unity of experience, and so enable us to have empirical experience of objects and to attain truth.³

What are these concepts? The fact that they make possible the *formal* unity of experience suggests that they are categories, but all concepts are in a sense the source of unity.⁴

One could have wished Kant to be more precise, but the interpretation does not greatly matter, since we never employ concepts in empirical recognition (or in judgement of intuitions) without also employing categories. These concepts, which are grounds⁵ for the recognition of the manifold, so far as they concern *only the form of an experience in general*, are the *categories*.⁶

Here again one would have liked some reference to the Metaphysical Deduction and the forms of judgement, but in the light of all that has been said there is no difficulty in understanding Kant's meaning.⁷ The categories are concepts of the

ception in the same way (e.g. in B 132, the beginning of § 13). This method produces a curious abruptness, which some have mistaken for inconsequence.

¹ Association and reproduction seem here to be equated. Contrast § 7 above, p. 485 n. 4.

² See A 115-16.

³ The objective validity of empirical knowledge is equated with truth, since to have valid knowledge of objects is to have truth.

⁴ Compare A 78-9 = B 104 and A 105-6.

⁵ This may mean only that all recognition depends upon concepts.

⁶ A 125. The words 'so far' are either restrictive, showing that only some of the concepts mentioned are categories—this is perhaps the most natural interpretation—or else they mean that the concepts referred to, *because* they make possible the *formal* unity of experience, are categories.

⁷ Vaihinger's complaint of obscurity (*Die Transcendentale Deduktion*, pp. 59-60 = 37-8) is due to the fact that he has not understood what has been said before, as is sufficiently obvious from his theory.

necessary synthetic unity which is necessary for every experience and for every object.¹ They are *a priori* conditions of the thought involved in experience, and they make experience possible, so far as the form of thought is concerned.² The unity of experience and the intellectual form of experience are the same thing.³

'All formal unity in the synthesis of imagination is therefore grounded upon the categories.' The synthesis of imagination to which Kant here refers is presumably the transcendental synthesis of imagination; but if he means every synthesis of imagination the result is the same, for the transcendental synthesis is present in, and is the condition of, every synthesis. The transcendental synthesis is a synthesis in accordance with the categories, and the formal unity in the synthesis is imposed upon all appearances, and is the condition of their agreement with the unity of apperception. It is consequently the condition of appearances being appearances of objects.⁴

The conclusion of the whole matter is this. Just as the spatial and temporal character⁵ of appearances is determined

¹ A 79 = B 105.

² A 93 = B 126.

³ Compare A 129-30. Needless to say, the categories are present in empirical recognition because the unity of apperception is present in every judgement. Why Kemp Smith (*Commentary*, p. 225) should question in this passage a doctrine which is at the root of the whole Critical Philosophy is beyond my comprehension. It is the more surprising in view of his almost excessive insistence that the categories articulate *every* judgement as a whole. See Chapter XV § 3.

⁴ The text is so corrupt in the last sentence of the paragraph in A 125 that its exact meaning can hardly be determined. Even with Adickes' emendation the empirical use of imagination is said to be present in recognition, which seems hardly a possible statement for Kant to make—at any rate if it implies, as it appears to do, a use distinct from reproduction, association, and apprehension. The word 'element' may refer to categories, as Kemp Smith suggests, for it is so used in A 96; but one would naturally expect the sense to be the same as in the immediately preceding sentence, where it refers to apprehension, association, reproduction, and recognition.

⁵ That is, the *general* character, not the *particular* character, for the latter is determined by things-in-themselves. We know *a priori* that everything must be spatial or temporal, but we do not know *a priori* what shape it will have, or how long it will last.

by human sensibility, so the unity or uniformity, the order and regularity, which we find in appearances and to which we give the name of 'nature',¹ is imposed by the character of human thought. If it were not so imposed we could never say that there was *necessary* unity or uniformity in the world of appearances. Because the unity of nature is necessary and universal, it must have its ground, not in things, but in powers of the mind which are the original source of *a priori* knowledge. The unity of nature is due to the subjective conditions or forms of human thinking; and these conditions are valid of objects, because they are the conditions of the possibility of experiencing or knowing any object whatsoever.

¹ *Natura formaliter spectata*. Compare A 418 n. – B 446 n. Here also it is only the *general* unity or uniformity (not particular unities or uniformities) which is imposed by thought. We know *a priori* that every event must have a cause, but we do not know *a priori* what the cause must be.

CHAPTER XXVII

UNDERSTANDING AND NATURE

§ 1. *Understanding as a Power of Rules*

We have now reached the conclusion of the Transcendental Deduction, but Kant adds some points of explanation. The first of these concerns the nature of understanding.

Understanding has been described as a spontaneity of knowledge,¹ as a power of thought,² and as a power of concepts³ or of judgements.⁴ It is now described as a power of rules,⁵ and that in two senses: firstly because it seeks to discover the empirical rules or laws of nature, and secondly because it imposes upon nature a certain number of necessary and universal laws.

It will be remembered that the unity of apperception in relation to the synthesis of imagination was said to be understanding.⁶ The unity of apperception is now said to be the rule, and the power or faculty of these rules is the understanding.⁷

I do not see how these descriptions can be made fully

¹ Compare A 51 = B 75.

² Compare A 15 = B 29, A 51 = B 75, and A 97. In A 97 understanding is also said to be a power of knowledge.

³ Compare A 68 = B 93, and also A 159-60 = B 199.

⁴ Compare A 69 = B 94.

⁵ A 126.

⁶ See A 119 and Chapter XXV § 11. Compare B 134 n. where the synthetic unity of apperception as a faculty may be identified with understanding, though there the statement is ambiguous.

⁷ A 127. 'The unity of apperception in relation to the manifold of ideas (that is, as determining the manifold by one idea) is the rule.' The meaning of this is obscure, and Kemp Smith translates it rather differently. 'One idea' I take to be a concept; the German is '*aus einer einzigen*', and '*Vorstellung*' must be understood. I do not understand why Adickes takes the 'one idea' to be the unity of apperception. If Kant had said 'contains the rule' rather than 'is the rule'—and he often uses 'is' and 'contains' as equivalent—the statement would have been easier to understand.

consistent with one another.¹ Kant seems to take the unity of apperception, now as a power or faculty, and now as the formal unity (or even the formal act) present in all acts of judgement.² As a power or faculty it appears to be identical with understanding.

The really important point is the difference between empirical and necessary laws, and it is unfortunate that Kant does not consistently use the words 'rule' and 'law' to indicate this difference.

§ 2. *Rules and Laws*

The different kinds of law (if 'law' may be used as a general term covering 'laws' and 'rules') ought to correspond, approximately if not precisely, to the different kinds of concept.

Corresponding to the categories there ought to be original (or non-derivative) laws which are strictly universal and necessary. These laws are the Principles of the Understanding, which may be called the 'Principles' for short. They apply to objects in general.

Corresponding to the 'predicables'³ there ought to be derivative laws which are universal and necessary, at least in a sense. The predicables however seem, unlike the categories, to apply, not to objects in general, but to objects of outer sense. If so,⁴ the corresponding laws, although necessary, are

¹ Kant complicates his exposition still further by saying (1) that understanding is itself the *source* of the laws of nature (A 127), and (2) that pure understanding is in the categories the *law* of the synthetic unity of all appearances (A 128); but the second statement is presumably meant to convey the same meaning as the first.

² Compare Chapter XXI §§ 1 and 4 for similar ambiguities in regard to apperception. I have already noted—Chapter XXI § 5—that Kant seems at times to equate the unity of apperception with the act of apperception: it is even more puzzling when he equates the unity of apperception with the power of apperception or understanding.

³ See A 82 = B 108. These are for Kant pure but derivative concepts.

⁴ The whole question of the application even of the categories to objects of inner sense is a difficult one, in regard to which caution is necessary.

not completely universal. They apply to some objects, and not to others, and may be called *particular* necessary laws.¹

There ought also to be laws corresponding to the pure concepts of mathematics, which are themselves particular, and not universal, concepts. If so, there ought to be a second set of particular necessary laws of a more limited character than the previous ones.

It is enough for the present purposes to say only that there are particular necessary laws, without considering any differences that there may be among them.²

There are also particular empirical laws corresponding to empirical concepts. They are to be found most conspicuously in the natural sciences.

Hence there are at least three different kinds of law, (1) Principles, (2) particular necessary laws, and (3) particular empirical laws. The last may be called simply 'empirical laws,' for we could never know that an empirical law was strictly universal.

We require three words for the three kinds of law,³ but Kant uses only two. The word 'law' seems to cover both 'Principles' and 'particular necessary laws', while 'rule' is used for 'empirical laws'. That is to say, the essential characteristic of law is its necessity, although a law which is also completely universal is a law in the fullest sense, and the Principles are sometimes described simply as 'laws' and opposed to 'particular laws'.⁴

¹ These are set forth in the *Metaphysische Anfangsgründe der Naturwissenschaft*, and belong, not to Transcendental Philosophy, but to the Metaphysic of Nature. See *M.A.d.N. Vor.* (IV 470).

² I am not sure that the difference suggested could be maintained, since (1) pure mathematics is not concerned with objects in the strict sense (see B 147), and (2) the particular necessary laws of science depend upon mathematics. See *M.A.d.N. Vor.* (IV 470).

³ E.g. Principles, laws, and rules.

⁴ B 165. The particular laws are not there divided into necessary laws and empirical rules.

§ 3. *Kant's Own Definitions*

The definitions of 'rule' and 'law' given by Kant himself are not altogether clear. 'Rules so far as they exhibit existence as *necessary*¹ (and are therefore necessarily involved² in knowledge of the object) are called laws'.³

This is unfortunately ambiguous, since if by 'object' Kant means 'object in general', the 'laws' are the Principles. He may, however, mean merely that where we have necessity, there we have law.

His other definition is equally difficult.⁴ 'The idea of a universal⁵ condition in accordance with which a certain⁶ manifold (therefore in the same kind of way⁷) can be posited is called a "rule", and if it *must* be so posited, is called a "law"'.⁸

Whatever the difficulties of this may be, a law is clearly marked by necessity, while a rule is not, and the reference to 'a certain manifold' suggests that particular necessary laws, and not merely principles, are to be included under the definition of law.

Unfortunately Kant, even in the passage which we are considering, does not use his distinction between rule and law consistently, and, as we have already seen,⁹ he talks freely of

¹ This is taken from a correction by Kant (*Nachträge* LII) quoted by Raymund Schmidt. The text says, 'Rules so far as they are objective', but this is obviously a mistake.

² '*anhängen*.' Kemp Smith translates 'and therefore necessarily depend upon knowledge of the object'. I do not think the German can mean this, and it makes nonsense of the distinction. At least some laws, namely the Principles, do *not* depend on knowledge of the object, while all rules (as opposed to laws) most certainly *do*.

³ A 126.

⁴ A 113. There is a play in this on the words '*gesetzt*' (posited) and '*Gesetz*' (law).

⁵ 'Universal' here covers 'general' (or 'particular') as well as 'strictly universal'; that is to say, it covers 'all of a kind' as well as 'absolutely all'.
⁶ '*gewisses*.'

⁷ ('*mithin auf einerlei Art*'). The precise meaning of this I do not see, and therefore translate literally. Perhaps Kant means that where we have similar manifolds given we can posit them under the same condition or order them in the same kind of way.

⁸ Compare Chapter XXIV § 1, footnote on p. 446.

⁹ E.g. A 108 and A 110.

'*a priori* rules'. He also talks freely of 'empirical laws'.¹ Nevertheless an understanding of these distinctions is essential, if we are to follow his argument.

§ 4. *The Understanding as Law-giver*

Kant believes in a hierarchy of rules and laws, but all empirical rules and all particular laws are only particular determinations of the universal laws, or Principles, which arise *a priori* in the understanding itself. These Principles are not borrowed from experience like empirical rules. They are imposed upon appearances by the understanding, and thereby make experience itself possible. Understanding is thus the law-giver for the world of nature, and it can be so, only because the world of nature is an appearance to human minds.²

The understanding imposes upon nature only the ultimate and universal laws, as Kant is careful to explain. The detailed empirical laws of nature can no more be derived *a priori* from pure understanding than the infinite variety of empirical intuitions can be derived *a priori* from the forms of space and time. Nevertheless just as all intuitions must be spatial and temporal, whatever be their empirical form, so all appearances of objects must be governed by the universal law of cause and effect (and by all the other Principles), whatever be the detailed differences which we can learn from experience, and from experience alone.³

Kant is no idealist, if an idealist is taken to be one who believes that pure thought can create reality.⁴ Empirical reality must always be given to finite minds by something other than themselves. But finite minds do not merely receive the given passively from without; they also determine the form of the given in certain ultimate and universal ways. They can receive it, and must receive it, only under the

¹ E.g. A 127.

² A 126 ff. Compare A 114, B 165, and A 159 = B 198.

³ Compare Chapter VI § 8.

⁴ I doubt whether any considerable philosopher has been an idealist in this sense.

universal forms of time and space, which depend on the nature of human sensibility. In addition, the mind as active imposes upon the manifold given in time and space its own necessary and universal laws, so that nature as we know it must have unity and uniformity. That unity and uniformity is known *a priori*, and is not a generalisation from experience. The particular ways in which that uniformity is realised can be known only by the patient investigations of science, which depends partly upon pure mathematics, but always to a greater or less degree upon empirical observation, that is, upon experience.

§ 5. *The Final Summary*

The final summary¹ repeats emphatically Kant's central doctrine that if the objects of our knowledge were things-in-themselves, *a priori* knowledge of them would be impossible. If all our concepts were derived by abstraction from things-in-themselves, then, granting that things-in-themselves might be known, all our concepts would be empirical.² If, on the other hand, some concepts were derived from our minds, there would be no ground for supposing that things-in-themselves must correspond to these concepts. In neither case could we possess *a priori* concepts giving us knowledge of reality. Only if our knowledge is concerned with appearances alone, is it possible, and indeed necessary, that we should possess such *a priori* concepts; for then the necessary connexion and unity of appearances which constitutes the essential nature of the object must be imposed by the mind itself, and can be known independently of the varying matter which is given to sense.

The details added in regard to the unity of apperception and the transcendental synthesis of imagination are merely a summary of the previous argument and offer no new difficulties; but Kant seems to stress the view that the intellectual form of *all* our knowledge of objects—a form which is found in the unity of apperception and the categories—constitutes

¹ A 128–30.

² This is the contention from which Kant started in A 92 = B 124–5.
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a formal *a priori* knowledge of all objects, not of course so far as they are given to sense, but so far as they are thought, as they must be if they are to be objects at all.

§ 6. *The Patchwork Theory*

The detailed analysis of the Transcendental Deduction, as set forth in the first edition, is now complete. I do not claim to have established the soundness of its conclusions, and still less to have shown that it is well arranged or well expressed. I do claim to have shown that so far from being a collection of unrelated jottings,¹ or a mishmash of contradictory expositions,² it is an argument, a coherent argument, and an argument on the grand scale. The provisional exposition may have been composed at a slightly earlier date than the authoritative exposition; but it contains substantially the same doctrine, and is, as Kant maintains, necessary for the full understanding of the authoritative exposition. If we can penetrate beyond the grammar of Kant's thought to the reality which he is attempting to describe, we shall see that the changes made in the authoritative exposition, when they are not confined to matters of terminology, are such changes as we should expect to arise when the doctrine of the provisional exposition has been thought out with greater clarity.

¹ Compare Vaihinger, *Die transcendente Deduktion*, p. 24 = p. 2, 'eine Reihe "loser Blätter" . . . welche . . . nur in einen losen Zusammenhang gebracht worden sind, ohne innere Durchdringung und Verschmelzung'.

² Compare the same work, p. 46 = p. 24, 'ein sehr lose komponiertes Neben- und Durcheinander verschiedener, widersprechender Darstellungen aus verschiedenen Zeiten'. I may add that these words do not exaggerate the chaos to which Vaihinger has reduced the Transcendental Deduction.

CHAPTER XXVIII

THE OBJECTIVE DEDUCTION

§ 1. *The Deduction in the Second Edition*

In the second edition Kant substituted an entirely new version of the Transcendental Deduction, retaining however the original introduction.¹ The main purpose of the change was not to add anything to what we have already learned, but to clear away obscurities and difficulties which, even in Kant's time, had given rise to misunderstanding.²

That there are many such obscurities and difficulties cannot be denied. Among these may be mentioned Kant's failure to explain clearly what is meant by a category, what is the distinction between apperception and inner sense, and what is the relation between apperception and imagination. These points are fundamental, and are to be distinguished from difficulties due to carelessness in terminology and expression.

A still greater defect of the earlier version is that it does not make explicit the connexion of the categories with the forms of judgement, and the necessity for judgement if we are to have knowledge of objects. The first point Kant had made clear in the Metaphysical Deduction, while the second is involved in the connexion between the concept and the object³—to call understanding a power of concepts or a power of judgement is the same thing, when properly understood.⁴ Nevertheless these contentions ought to have been emphasised in the Transcendental Deduction itself.

Still more detrimental to the understanding of Kant's argument is his failure, in the first edition, to stress sufficiently the importance of time as the connecting link between apperception and the manifold of sense. He does indeed assert, at the very outset, that his whole argument rests upon the fact

¹ Section 1, §§ 13–14. The last paragraph of this section was removed and three new paragraphs put in its place.

² B XXXVII–XXXVIII.

³ A 103 ff.

⁴ A 126.

that all our cognitions are subject to time as the form of inner sense.¹ This is clear enough in the earlier parts of his provisional exposition;² but as he proceeds time is so little emphasised that it might seem to be a mere parallel³ to the unity of apperception, rather than the medium through which the categories must apply to the sensible world.

Kant has made it clear from the first that apart from pure intuition there could be no Transcendental Logic;⁴ that a transcendental synthesis of imagination, as pure, must be a synthesis of time and space;⁵ and that only by a pure transcendental synthesis can the categories apply to objects.⁶ All this is confirmed beyond any possibility of doubt by the subsequent chapters on the Schematism and the Principles. Nevertheless he would have made things much easier, if he had explained in the Transcendental Deduction itself how the categories must be schematised in reference to time, and how—what is another aspect of the same fact—the transcendental synthesis of imagination must work through the medium of time.

All these points Kant attempts to make clearer in the second edition. The new account gathers the argument together, looking back towards the Metaphysical Deduction and forward towards the chapter on Schematism. In my opinion it is—even with all its defects—the firmest and most intelligible account which Kant has given, and I find it difficult to understand how competent critics have thought otherwise.⁷ I believe Kant is right in saying that it does not add anything which was not implicit in the first edition, and the suggestion that he was retracting the views there expressed seems to me groundless. The difference between the two editions is mainly one of

¹ A 99.

² Subsections 1 and 2 of Section 2.

³ A 110, A 123–4. Compare B 136, B 144. Time stands to intuitions as the unity of apperception stands to thoughts.

⁴ A 55 = B 79, A 76–7 = B 102, A 78 = B 104.

⁵ A 77 = B 103, A 101.

⁶ A 118–19, A 123.

⁷ Compare, e.g., Prichard, *Kant's Theory of Knowledge*, p. 161. I do not of course deny that the first version goes into more detail on many points, and so helps greatly towards the understanding of the second version.

emphasis, though the new account shows an increased tendency to treat space as almost on an equality with time, and is more inclined to describe imagination as understanding working at a lower level.

§ 2. *The Objective and Subjective Deductions*

In spite of the fact that in the first edition Kant had not grasped the shortest method of proof,¹ the proof in the second edition is not noticeably shorter.

The argument falls into two separate parts, the first of which deals with the pure categories, and the second with the categories as schematised. In other words, the first part shows that the categories are principles of synthesis imposed by the nature of discursive thought itself, and are necessary for any intelligent being who can know only objects given in intuition to *some kind of sensibility*; the second part shows how the categories, as principles governing the transcendental synthesis of imagination, are necessary for intelligent beings possessed of *human sensibility*, that is, possessed of a sensibility which involves the form of *time*.

More simply, the first part establishes the objective validity of the pure categories, while the second explains the subjective machinery which makes understanding possible as a faculty of human knowledge.

It is at least a plausible hypothesis that the distinction between the two halves of the Deduction in the new version is a distinction between the objective and subjective sides of the Deduction.² If so, on this point also Kant has now disentangled for us what has hitherto been confused. For this reason I have called the present chapter 'The Objective Deduction' and the following chapter 'The Subjective Deduction'.³

The difference between the two halves is explained in

¹ *M.A.d.N. Vor.* (IV 476 n.).

² See A XVI-XVII and Chapter XI § 11.

³ I do not claim that in the first edition Kant distinguished the Objective and Subjective Deductions precisely in this way, as it is possible that he did not at first think out the distinction clearly.

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§ 21 of the Deduction,¹ and it is convenient to regard the
second half as beginning at § 22.²

§ 3. *Summary of the Objective Deduction*

The whole argument in the second edition is divided into a number of subsections.³ It is not easy, even with the help of Kant's own headings,⁴ to be sure what is the main point of each subsection, but the skeleton of the Objective Deduction is roughly as follows.

Synthesis of the manifold of intuition is necessary for knowledge of objects, and is due to understanding (§ 15).

The unity of apperception is necessary for synthesis of the manifold of intuition, and is itself impossible apart from such a synthesis (§ 16).

Knowledge of objects therefore depends on the unity of apperception (§ 17).

The unity of apperception is an objective unity, that is, it involves the unity of the object known. It must be distinguished from a merely subjective unity, that is, from the unity which ideas have because they happen to be associated in our minds (§ 18).

The synthesis of the manifold under the unity of apperception takes place by means of judgements (§ 19).

Hence the given manifold, if it is to be synthetised under the unity of apperception, and so to be an object of knowledge, must be determined in relation to the form of judgement. It must therefore conform to a category, and indeed to all the categories,⁵ since the categories are the forms of judgement

¹ Such references in the next two chapters apply to subsections of the Deduction in the second edition, and not (unless expressly stated) to the subsections of these chapters.

² §§ 22–3 might be regarded as an appendix to the first half.

³ §§ 15–27. In the present chapter I have tried to make my own divisions follow those of Kant even at the expense of making them unduly long.

⁴ These are sometimes illuminating, and should not be ignored.

⁵ The reason for this is that the general form of judgement articulates itself into different forms, and an object which is determined

so far as these forms determine the manifold of intuition (§ 20).

§ 20 is the essence of the Objective Deduction.

The whole argument is an analysis of the formal element contributed by thought to our knowledge of objects and so to objects as known. We must not forget that Kant is dealing in abstraction with one element in knowledge or experience, just as he is in the Aesthetic. If we fail to remember this, we shall, in the one case as in the other, be unable to understand his doctrine.

§ 4. *Combination or Synthesis*

All synthesis (here identified with combination¹) is said to be the work of understanding. It is an act of the mind, and cannot be ascribed to sense, which is passive. The manifold of ideas can be given in a sensuous intuition, but it can never be united by sense.² It must indeed be given under certain forms (space and time), which are due to the nature of our sensibility and are not the products of our thought. Nevertheless space and time, considered as existing for sense alone, have no unity or combination in themselves,³ and cannot be the source of unity or combination in the empirical manifold.

In this passage⁴ Kant apparently considers understanding to be the source of all the mind's activity or spontaneity, and the only antithesis mentioned is that between passive sense and active understanding.⁵ This suggests that he regards imagination as understanding working at a lower level;⁶ yet although he speaks of combination *in general*, he is, I believe,

by the general form of judgement must be determinable by all forms of judgement.

¹ B 129, '*Verbindung*' or '*conjunctio*.' Compare B 201 n.

² Compare A 99, where Kant says it can never be 'represented as a manifold'. Here, however, I think he means it can never be united by sense into an object (or concrete thing).

³ Compare B 160-1 n. and A 107.

⁴ B 129-30.

⁵ Compare A 15 = B 29, A 19 = B 33, A 51 = B 75. Spontaneity is here called 'understanding' 'in distinction from sensibility'.

⁶ Compare B 162 n.

thinking only of that kind of combination which is necessary for an *object*.¹ An objective combination (or objective unity) requires thought (as well as imagination) and is to be distinguished from the subjective combination of ideas in our mind through mere imagination.²

Synthesis may be of various kinds. It may be a synthesis of intuitions either empirical or pure,³ or it may be a synthesis of concepts.⁴ These syntheses are not to be regarded as mutually exclusive; for all of them may be involved in the same act of judgement. Furthermore we may or may not be conscious of the act of synthesis.⁵ In all cases the synthesis is said to be an act of understanding, and this seems to imply that it is an act of judgement.⁶

Difficulties may be felt in thus ascribing to judgement, or even to understanding, the synthesis of *intuitions*. In the Metaphysical Deduction Kant described the function of judgement (or of understanding) as giving unity to the *imaginative* synthesis of different ideas (or *sensa*) in an intuition;⁷ and if we distinguish between understanding and imagination,

¹ B 130: 'We cannot represent anything as combined in the *object*, unless we have ourselves already combined it, and of all ideas *combination* is the only one which cannot be given through *objects*.' In B 129 he speaks of the combination of a manifold *in general*. This may imply that he is thinking of that (objective) combination which is always the same, whatever particular manifold be given: if he means objective combination, he is surely right in saying it cannot come through sense.

² Compare B 141. The detailed discussion of imagination is reserved for the Subjective Deduction; see § 24.

³ Kant says 'sensuous or non-sensuous', but this seems to be a slip for 'empirical or non-empirical'.

⁴ For example, a synthesis of the subject-concept and the predicate-concept, using these terms in their widest sense. Even a hypothetical or disjunctive judgement is a synthesis of concepts inasmuch as it is a synthesis of judgements which in turn are syntheses of concepts.

⁵ Compare A 103, A 117 n., and Chapters XIX § 8 and XXV § 6.

⁶ Compare § 19 and also A 69 = B 94: 'All acts of understanding can be reduced to judgement.'

⁷ See A 79 = B 104-5. The phrase 'mere synthesis' implies that the synthesis is imaginative; see Chapter XIV § 3.

we must say that understanding imposes synthetic unity on the given manifold only through the activity of imagination. At present Kant seems anxious not to make this distinction:¹ he is concerned only with the synthesis (or unity) of intuitions so far as it is demanded, and (as he believes) imposed, by thought itself. It is enough to say that if we consider judgement concretely, it involves synthesis of a given manifold of intuition,² and not merely a synthesis of concepts.³ Indeed it is on the synthesis of the manifold of intuition that Kant seems to lay the greater stress, the synthesis through which alone we can have knowledge of an object.

This act of synthesis must be one act, if it is to unite a given manifold; and it must be the same act, no matter what be the differences in the manifold united.⁴ Analysis, which is supposed to be its opposite, always presupposes it; for we cannot analyse anything, unless we are holding it together before the mind.⁵ It is only because understanding has combined the manifold,

¹ He seems to avoid reference to the subjective machinery of cognition at this stage of the argument. No doubt understanding and sensibility as well as imagination may be regarded as belonging to that subjective machinery; but their connexion with the concepts and intuitions necessary to knowledge is commonly accepted, whereas the part played by imagination is a doctrine peculiar to Kant himself. Furthermore imagination is bound up with time, since it is a power of representing an object which is not present to intuition (see B 151); and here we are considering synthesis without special reference to time. Perhaps he has also in mind the view which he makes explicit later—see B 162 n.—that imagination is understanding working at a lower level.

² This is the central doctrine of the Metaphysical Deduction and need not be further elaborated here. It applies to conception as well as to judgement, if we distinguish conception from judgement.

³ I think Kant means to assert that there is a synthesis of concepts in all judgements, including analytic judgements; see B 131 n. In the logical functions of judgement combination and therefore unity of given *concepts* is said to be thought; see B 131. The context leaves little doubt that this unity is a synthetic unity.

⁴ B 130: 'It is originally one, and is the same (*gleichgeltend*) for all combination.' Kant is thinking of the act of synthesis so far as it is involved in judgement as such; compare his doctrine of the unity of apperception in A 107 ff.

⁵ Compare A 77 = B 103 and B 133 n.

that we can suppose the manifold to be given¹ as a whole which requires analysis.²

Synthesis, as always for Kant, involves not only unity of the act of synthesis, but also unity of the manifold synthesised. He speaks as if he were engaged in an analysis of the concept of 'combination'; and finds that this concept carries with it, not only a concept of the manifold³ and a concept of its synthesis,⁴ but also a concept of the unity of the manifold. 'Combination is representation of the *synthetic* unity of the manifold.'

Here again Kant does not distinguish the different factors at work—(1) the synthesis of imagination and (2) the bringing of the synthesis to concepts.⁵ The exact interpretation of his view is difficult; for 'representation' is ambiguous.⁶ On the whole I take him to mean merely that combination *involves* conception of the synthetic unity of the manifold.⁷

¹ Note that 'given' is a relative term. We can regard all our past knowledge as given for subsequent analysis, and we can regard the whole world as given to us, if we ignore the fact that it must be taken or thought as well as given. See § 11 of this chapter.

² I am supposing that Kant has in view primarily the synthesis and analysis of the manifold of intuition (as united into an object or objects); but it is equally true that the analysis of a concept presupposes a synthesis of the elements which that concept contains. The synthesis may of course give us a cognition which is 'rough and confused' and in need of analysis; see A 77 = B 103.

³ This suggests that in all combination—even in combination of concepts—the manifold of intuition must be combined.

⁴ This second concept seems to be superfluous. I cannot see that Kant is making any distinction between 'synthesis' and 'combination': they are both described as 'acts' in B 130.

⁵ Compare A 77–8 = B 103. By bringing the synthesis to concepts we conceive the synthetic unity of the manifold and so attain to knowledge of an object.

⁶ It may in itself be used either for intuition or for conception or for the union of intuition and conception in knowledge.

⁷ The fact that Kant uses the word 'is' in place of 'involves' is not, I think, fatal to this interpretation; for he uses the word 'is' very loosely. He can hardly intend to *identify* combination with conception of synthetic unity to the *exclusion* of the imaginative synthesis of intuitions. I doubt also whether he could intend in this sentence to identify combination with the *whole* work of understanding and

The objection may be raised that combination or synthesis is independent of conception, and that conception, whether it be regarded as conception of the principle governing the synthesis or as conception of the synthetic unity of the manifold, is itself distinct from synthesis. We must however remember that for Kant the understanding in conceiving or judging does not merely *recognise* the principle governing the synthesis and the unity of the manifold thereby produced: it *imposes* the ultimate principles governing the synthesis, and so imposes certain kinds of synthetic unity on the manifold synthesised.¹ Kant may have this point in mind when he says that representation—which I take to be conception—of this synthetic unity cannot therefore arise out of combination.² On the contrary, by being added to the representation³ of the manifold it makes the concept of combination possible.⁴

Much of this is obscure, but Kant's central doctrine is clear enough: the act of understanding—and therefore presumably judgement—is an act of synthesis which involves, or presupposes, conception of the synthetic unity of a manifold given to sense.⁵ To this it may be objected that on his own showing

imagination as manifested in knowledge—if he did, it would be more natural to say that combination is representation of *objects*. On my view he is merely restating what he has said in the previous sentence; and both the preceding and the succeeding sentences seem to imply that combination is not to be *identified* with conception of synthetic unity, which is only one of the elements in it.

¹ Compare Chapter XIV § 3.

² B 131. I confess that the reason for using 'therefore' is not clear to me. So far as I can see, Kant means that the representation (or conception) of synthetic unity cannot arise out of combination, because it is present in, and presupposed by, combination.

³ I suppose 'representation' here must mean 'intuition'. 'Addition' is not a very satisfactory term to express the relation between the concept of synthetic unity and the intuitions which are united under it.

⁴ Perhaps he means that only because we conceive the manifold to be united in an object can we acquire the concept of 'combination' by analysis; but the statement is obscure.

⁵ This manifold is described in B 129 as a 'manifold *in general*'. The phrase warns us that the manifold in question is not necessarily to be regarded as given to human senses under the forms of time and space; see Chapter XXIX § 2.

some judgements are analytic. Kant replies that the distinction between analytic and synthetic judgements is here irrelevant.¹ It is true that in judgements the concepts² employed may be identical in the sense that one can be thought analytically through the other. Nevertheless we must distinguish *consciousness* of the one from *consciousness* of the other; and the relevant point here is that there must be a synthesis of such (possible) consciousness.

I believe Kant to hold that even in analytic judgements there is a synthesis of concepts.³ His main point here, however, is that consciousness of the one concept differs from consciousness of the other, *so far as the manifold referred to by these concepts enters into the question*. In the judgement 'All bodies are divisible' we may say that the concept of 'divisibility' is already thought in the concept of 'body'. Nevertheless the two concepts do not refer to the same manifold, since the concept of divisibility is 'wider' or 'higher' than the concept of 'body';⁴ and if our consciousness of a concept involves consciousness of the manifold to which it refers, the consciousness of the one concept must be different from that of the other.⁵ Kant seems to have in mind that even in analytic judgements the manifold

¹ B 131 n.

² Kant says 'ideas'; and it may be suggested that as this is a note to the statement that combination is representation of the synthetic unity of the *manifold*, Kant must have in mind analysis of intuitions, not of concepts. If this were true, the note would have nothing to do with analytic judgements. If, however, Kant were referring to intuitions, he could hardly, I think, say that one is *thought* through the other, and it must be remembered that for Kant synthesis of the manifold involves concepts and concepts involve synthesis of the manifold.

³ In the logical functions (or forms) of judgement combination and therefore unity of *concepts* is already thought; see B 131. As I pointed out above, this unity is a synthetic unity.

⁴ See A 68-9 = B 93-4.

⁵ When Kant says we must distinguish consciousness of the one concept from consciousness of the other, *so far as the manifold enters into consideration*, he may have in mind the further point that so far as the *form of thought* is concerned one and the same transcendental consciousness must be present throughout.

must be synthetised in accordance with concepts and with their union in the judgement.¹

Every judgement is a synthesis, not only of concepts (for example, the subject- and predicate-concepts), but also of the manifold which is thought under these concepts. In every judgement we think that the manifold is united or combined in accordance with the concepts used.² The unity of the manifold is therefore thought in every judgement so far as it gives us knowledge of objects.

That unity of the manifold which is involved in all our thinking (and so in all objective combination) is not a blank numerical unity such as is thought in the category of unity.³ It is a synthetic unity, a unity of *different* elements. We may compare it with the qualitative unity which is to be found in a play or a speech or a story.⁴ It is involved in every form of judgement,⁵ and not merely in what is called the 'quantity' of judgement; for in every form of judgement we think the unity of different concepts and consequently of the manifold conceived under these concepts. The manifold has to be

¹ This explains, I think, why the note is appended to the description of combination as representation of the synthetic unity of the *manifold*. It explains also the reference to *possible* consciousness. In an analytic judgement the consciousness of each concept is actual, not merely possible. The consciousness of the manifold to which the concepts refer is alone properly described as possible; and the characteristic of analytic judgements is that in them we make no appeal to actual intuition.

² This is true when we say 'All bodies are extended', as well as when we say 'All bodies are heavy'. Kant has in mind, not the analytic unity of different bodies in virtue of their common characteristics, such as extension and heaviness, but the synthetic unity whereby extension and heaviness are combined in each body, for example, as accidents of a substance.

³ The category of unity is the concept of a unit homogeneous with other units. In counting we ignore the internal differences of what we count.

⁴ See B 114. Note that in B 131 Kant seems to describe this unity indifferently as a unity of the manifold and a unity of concepts.

⁵ It is to be observed that 'combination' or 'unity of concepts' is thought in the *logical* forms of judgement. Yet Kant is said not to have recognised the presence of synthesis in every judgement, and to have confined the forms of judgement to analytic judgements.

united in accordance with all the categories, and its synthetic unity is to be sought, not merely in one category or in one form of judgement, but in the ultimate ground of all judgement and all thought.¹

§ 5. *The Synthetic Unity of Apperception*

The ultimate ground of all judgement and all thought, whether that thought is analytic or synthetic, is pure or original apperception. This is described as an act of spontaneity and is identified with the idea 'I think' which must be able² to accompany all my ideas;³ but it is also described as that self-consciousness which produces the idea 'I think'.⁴

The reason why the idea 'I think' must be able to accompany all my ideas is that otherwise they would not be ideas of anything, or in other words they would not be ideas of any object.⁵

¹ Note that the ground of synthetic unity is also the ground of the possibility of understanding even in its *logical* use. The logical use seems here to be connected with the unity of different concepts in judgement; but it must cover the whole use described in Formal Logic and manifested in all judgement so far as judgement unites a plurality of different individual objects under general concepts obtained by abstraction and analysis; see A 67 = B 92 ff. and Chapters XII § 5 and XIV especially §§ 2 and 8. If there were no synthesis of the manifold, there could be no objects and no objective world; and consequently we could never acquire concepts of these objects by analysis nor unite these different concepts in judgement on the basis of such analysis.

² The reason why Kant says 'must be *able* to accompany' rather than 'must accompany' is, I presume, that the 'I think' need not be made explicit in consciousness; see A 117 n. and also B 134. He may also have in mind the fact that ideas may have some sort of existence, if they are related to a *possible* consciousness; see A 120.

³ B 131-2. This confirms the view that the synthesis which Kant has hitherto described is the synthesis involved in judging an object, and not merely an imaginative synthesis. We might call it the synthesis of recognition. For some reason Kant seems anxious to keep *judgement* (and its connexion with *objects*) in the background, till he comes to § 19, but it is clearly present in his thought throughout.

⁴ Here apperception might be taken as a power rather than an act; compare Chapter XXI § 4.

⁵ B 132; compare A 116. Kant says 'Otherwise there would be an idea in me of something which could not be thought'; and he adds

At the present stage, however, Kant is apparently avoiding reference to objects,¹ and a little later he urges the necessity of pure apperception on the ground that without it my ideas would not be *my* ideas.² But this seems merely to assert the same point in another way; for the only reason why my ideas must be my ideas (or ideas belonging to one and the same self-consciousness) is that, unless they were, they could not possess unity and so be ideas of objects in one objective world.³

It is this fact which enables us to say that although intuitions are ideas which can be given prior to all thought,⁴ they have nevertheless a *necessary* relation to pure apperception.⁵

Here, as always in Kant, pure apperception involves self-consciousness, at least potentially: it is consciousness of the *act* of thinking, and to think is to be potentially conscious of thinking. As pure it is consciousness of the act of thinking⁶ in abstraction from the matter of thought, and so is distinguished from empirical apperception. It is also 'original' and that such an idea would be impossible, or at least would be nothing for me. The meaning of this is not too clear, but in the light of B 137 I think Kant is reasserting the doctrine of the first edition. See also B 144 n. Kant's whole proof rests on our conception of that unity of intuition whereby an object is constituted—a unity which involves both synthesis of a given manifold and relation to the unity of apperception.

¹ Though 'object' is mentioned incidentally in B 130.

² B 132-3. Note that Kant has in mind the manifold ideas given in one definite intuition (*in einer gewissen Anschauung*)—presumably the intuition of an object. Note also that as *my* ideas they must conform to the condition under which alone they *can* stand together in one universal self-consciousness. We should have been grateful if Kant had stated clearly whether this universal self-consciousness is to be regarded as present in the intuitions of other men as well as in my other intuitions; and whether it extends beyond the actual intuitions of human beings to possible intuitions. Compare Chapter XXIV § 4.

³ Kant explicitly disclaims the view that I am necessarily conscious of them as *my* ideas; compare A 103-4 and A 117 n.

⁴ This may mean only 'independently of thought'. It is the doctrine which is alleged to be un-Critical in A 89 = B 122.

⁵ Or to understanding; compare A 119.

⁶ Presumably as regards its form.

not derivative: that is to say, it produces—or is—the idea ‘I think’, which is one and the same in all consciousness, and must be able to accompany all my ideas, but is not derived¹ from any of them.

The unity of apperception is transcendental as the ultimate condition of knowledge, and as the source of further *a priori* knowledge.²

So far we have seen that if ideas are to be ideas of an object, they must be united in one potentially self-conscious thinking, or in other words must be related to the unity of apperception. We have now to look at this from the other side. The unity of apperception is itself impossible apart from synthesis of the given manifold, and consciousness of this synthesis.³ As always in Kant, the unity of apperception and the unity of the manifold mutually condition one another, if indeed they are not to be regarded as identical with one another.⁴

In supporting this contention Kant is able to explain more clearly what he means by self-consciousness, and why he identifies the unity of apperception, not with mere self-identity, but with consciousness of self-identity.

It is obvious that an idea, at any rate if it is to be a ‘clear’ idea, must be accompanied by consciousness. But Kant is not talking about empirical consciousness of this kind. He is not saying merely that there must be awareness of this followed by awareness of that.⁵ To say this is to break up our experience, after the fashion of some modern philosophers, into a succession of momentary awarenesses, or momentary selves, as

¹ B 132. ‘*begleitet*’ (accompanied) seems to me an obvious misprint for ‘*abgeleitet*’ (derived), which is the correct antithesis to ‘*ursprünglich*’ (original). If an idea A must be able to accompany ideas B, C, D, . . . , then surely idea A can be accompanied by ideas B, C, D, Kemp Smith retains the original text.

² Kant mentions here only the latter point. Compare A 106–7 and A 116. Note also that the phrase ‘unity of apperception’ seems intended to imply that the idea ‘I think’ must be one and the same in all consciousness. No other explanation of the phrase is given.

³ This is, I presume, the synthesis alleged by Vaihinger to be unconscious. ⁴ Compare A 105, A 109, B 137, and Chapter XX § 3.

⁵ Compare A 117 n. and Chapter XXV § 4.

diversified and transient as the ideas of which they are aware. Such a view destroys the very possibility of knowledge.

The unity of apperception, on the other hand, is the condition of the possibility of knowledge. It is not to be found in the fact that every idea is accompanied by consciousness. It is to be found in the fact that I add one idea to another, or conjoin one idea with another, and am conscious of this *act* of synthesis.¹ It is only because I can combine the manifold of ideas in *one* consciousness that I can represent to myself the identity of consciousness in these ideas.²

Kant puts this point more technically by saying that the analytic unity of apperception presupposes the synthetic.

The analytic unity of apperception appears to be the unity of thought which is manifested in uniting different ideas (or objects) under a common concept by means of analysis.³ The synthetic unity of apperception is the unity of thought which is manifested in uniting different intuitions into one object by means of synthesis.⁴ The analytic unity always presupposes the synthetic, because we can analyse only what is held together before the mind.⁵ In the case Kant is considering the analytic

¹ If I am right—see Chapter XXI §§ 3-4—consciousness of the act of synthesis so far as this act is determined by the nature of the given matter must be empirical apperception. Transcendental apperception is consciousness of the universal nature, or form, present in all such acts of synthesis, and this Kant seems to regard as consciousness of one pure formal act of synthesis which is the same in all synthesis—or in his language is ‘originally one, and is equivalent (*gleichgeltend*) for all combination’; see B 130. ² B 133.

³ I do not think the analytic unity of apperception has anything to do with the analytic judgement ‘I am I’, as Caird seems to imply; see *The Critical Philosophy of Kant*, Vol. I, pp. 399 ff. It is primarily connected—according to the note on B 133—with the making or thinking of concepts by analysis of given intuitions of objects. Perhaps Kant may have regarded it as present also in analytic judgements, which are made by analysis of concepts, not of intuitions; but for this I have seen no evidence.

⁴ Both analytic and synthetic unity are present in every judgement whereby we have knowledge of objects; see A 79 = B 104-5.

⁵ The synthetic unity does not presuppose the analytic in the same way, since we can hold the manifold together in an ‘indistinct’ or ‘confused’ idea, which has not yet received the analysis it requires.

unity of apperception is manifested in finding the common characteristic of being 'mine' in all my ideas, or in finding that all these ideas belong to one and the same self.¹ This would be impossible unless I held these ideas before the mind in one act of consciousness, so that the analytic unity of apperception presupposes the synthetic.²

It should be emphasised that here, as in the first edition, Kant does not claim that synthesis necessarily takes place in the full light of consciousness. I may, or may not, be aware of the act of synthesis.³ I may, or may not, be conscious of my ideas as mine.⁴ If I am conscious of my ideas as my ideas, this implies⁵ that I unite (or can unite) these ideas in one self-consciousness. It does not, however, imply consciousness

¹ This is what Kant calls 'representing to myself the identity of consciousness in these ideas'.

² To take a more modern example—see Broad, *The Mind and its Place in Nature*, p. 606—if I could be aware by analysis that the self is 'a numerically identical substantial constituent common to all our successive total states', this would depend upon the fact that I could hold these states before me in one synthetic act. I do not think that this truth is sufficiently recognised to-day.

It should be noted that the analytic unity of apperception is involved (*anhängt*) in all concepts as such. In thinking of 'redness' for example—to take the simplest of concepts—I recognise by an act of analysis that redness is a characteristic common to different intuitions or objects. But this means that I must by an act of synthesis have held together the different intuitions found in this red apple (and in other red objects). I need not of course, once I have acquired the concept, actually see a red apple, if I am to think of redness: it is enough that I combine *possible* representations. Synthesis is, however, the condition of that analysis which is involved in conception as such, and so in judgement. This means that the synthetic unity of apperception is the ultimate condition of all knowledge, including Logic and the Transcendental Philosophy.

There are complications in this doctrine which I must pass over, and some of Kant's phrases are puzzling, for example the statement that I must think in the idea 'red' the analytic unity of consciousness, which makes it a *conceptus communis*; but his doctrine is clear enough in its broad lines, and I suggest that it is also true.

³ B 130.

⁴ B 132.

⁵ Kant says that these two thoughts 'mean' the same, but we must not suppose that they *are* the same. The argument implies that we can have one without the other.

of the synthesis, though it does imply the possibility of the synthesis (and ultimately the possibility of consciousness of the synthesis).

To say that Kant regarded the synthesis involved in apperception as either necessarily conscious or necessarily unconscious is remote from the truth.¹

The conclusion of the whole matter is that the synthetic unity of apperception is the ground of the necessary synthetic unity of the manifold, and *vice versa*. This is Kant's way of saying that neither is possible apart from the other;² but it is the synthetic unity of apperception which is ultimate or 'original',³ since synthetic unity of the manifold is not given in or through the objects.⁴ So far as we can speak of it as 'given'⁵ at all, we can do so only because the manifold has been synthesised by the understanding.⁶

Apperception, as a power or faculty, is identical with understanding.⁷ Understanding is a power of *a priori* synthesis whereby the manifold of given ideas is brought under the unity of apperception.⁸ This is to say that understanding is a power

¹ Compare A 117 n.

² B 134. Compare A 105, A 106-7.

³ Unity comes from apperception alone, though this unity can be manifested only in the synthesis of a given manifold.

⁴ B 134. Compare B 130.

⁵ I see no need to change the reading in B 134, where it is said to be 'given' *a priori*. Compare B 143 and § 11 of this chapter.

⁶ B 130 at the end. *Given* ideas may be either concepts or intuitions, and the manifold so far as *given* in *one* intuition is already determined in relation to a form of judgement; compare B 143. The one intuition must be an object.

⁷ B 134 n. Kant may mean that the *unity* of apperception is identical with understanding, since A 119 supports this view. I have avoided saying so above, because it would clash so obviously with the sentence following.

⁸ B 135. Understanding is a power of *a priori* synthesis, since in all judgement as such there is a synthesis which is one and the same whatever be the matter combined; compare B 130. All empirical synthesis (the differences between which depend on differences in the matter given) must conform to the *a priori* synthesis without which there could be no judgement at all. Compare Chapter XXVII § 1.

of judgement,¹ and it implies that in *all* judgement there is an *a priori* synthesis.²

Kant insists further that the manifold to be synthesised by human understanding must be given to sense.³ The possibility of an understanding for which this is not so need not be considered here.⁴

§ 6. *Apperception and Objects of Knowledge*

We have now to draw the obvious conclusion that the synthetic unity of apperception (since it is the condition of necessary synthetic unity in the manifold of intuition) is the condition of knowledge (or experience) of objects. If so, it must be the condition of objects themselves.⁵

Kant begins⁶ with his customary introduction. He reasserts that space and time are the conditions under which the manifold is *given*, while the synthetic unity of apperception is the condition of its being *thought* or *known*.⁷ Nothing can be thought or known unless it is capable of being combined in one consciousness.

Understanding is the power of knowing,⁸ and knowledge always involves a determinate⁹ relation of our ideas¹⁰ to an object. An object is that in the concept of which the manifold

¹ B 141. Compare A 126.

² All this supports the doctrine considered by Vaihinger and Kemp Smith so impossible in A 104 ff., and also the doctrine in A 125.

³ B 135.

⁴ See Chapter XXIX §§ 1 and 4.

⁵ Compare A 111 and A 158 = B 197.

⁶ B 136.

⁷ That is, thought or known as an object. Compare A 93 = B 125–6.

⁸ Kant says it is 'the power of cognitions' (*Erkenntnisse*). Unfortunately we cannot talk of 'knowledges' in English, and even to talk of 'knowings' is difficult. For other definitions of understanding see A 126 and Chapter XXVII § 1.

⁹ The word 'determinate' is difficult. Compare the statement in B 128–9. To determine our ideas is to give them an intellectual *form*, and so to bring them under the categories and make them ideas of an object. See also A 266 = B 322 ff. Determination may take place by means of any concept—see, for example, the concept of 'line' in B 137–8 and compare A 105—but the categories are always presupposed.

¹⁰ Here given intuitions or appearances.

of a given intuition is united.¹ Our intuitions must be united or combined or synthetised, if they are to be intuitions of an object, and such combination or synthesis is impossible apart from the unity of apperception. Hence the synthetic unity of apperception is the condition under which alone ideas can have reference to an object. It constitutes the objective validity of ideas: that is to say, through it alone are ideas cognitions of an object.

The synthetic unity of apperception is therefore the condition of all knowledge, and on it depends the possibility of understanding itself.² It is for this reason that the principle of the synthetic unity of apperception is the supreme principle of *all* employment of the understanding.³

Kant emphasises the fact that his argument applies to all intuitions, pure as well as empirical. Every intuition must be subject to the synthetic unity of apperception in order to be an object for me.⁴

This doctrine is familiar to us, and is identical with the doctrine of the first edition.

It is unfortunate that we are not given one authoritative and precise formulation for the ultimate principle of the synthetic unity of apperception.⁵ The simplest statement is that 'all the

¹ B 137. 'United' is equivalent to 'necessarily united'. Compare A 106, 'An object is the "something", the concept of which expresses such a necessity of synthesis'; also A 105, 'that unity, which constitutes the concept of an object'. This is confirmed by A 109. In the present passage Kant does not use the term 'transcendental object', but his doctrine has not changed.

² B 137. Here the unity of apperception is distinguished from understanding, not identified with it as in A 119 and possibly even in B 134 n. From the context understanding might be taken as the power of *knowing*—compare A 97—but the unity of apperception is necessary to *thought* as such; see B 138.

³ 'All employment of the understanding' must cover thinking—as well as knowing; compare B 138 and B 134 n. For this distinction, see B 146 and compare Chapter II § 4.

⁴ B 138. This is equivalent to 'referring or relating to an object' as in B 137 above.

⁵ It is formulated in B 134–5, in B 136, in B 137, and again in B 138 (in the last passage twice).

manifold of intuition stands under conditions¹ of the original² synthetic unity of apperception'.³

As so formulated, the principle does not look like an analytic proposition, but Kant asserts twice over that his ultimate principle is an analytic proposition.⁴ To bring out its analytic character he formulates it as follows: 'All *my* ideas in any given intuition⁵ must be subject to that condition under which alone I can ascribe them as *my* ideas to one and the same self, and under which therefore I can grasp or comprehend them, through the general expression "I think", as synthetically combined in one apperception'.⁶

This assertion is obviously analytic, so far as it affirms that all my ideas must be my ideas. It nevertheless makes synthetic unity the condition of all thought.⁷ The implications of the principle seem to go far beyond any merely analytic proposition, and to presuppose the possibility of making assertions about human knowledge as a whole.⁸ The proposition can be analytic only if it is made by analysis of the concept of human knowledge.⁹

§ 7. *The Objective Unity of Apperception*

Kant has been arguing, as in the first edition, that the transcendental unity of apperception is the ground of necessary

¹ The plural, as usual, must refer to the categories. Compare A 111.

² The German is '*ursprünglich synthetischen*' (originally synthetic).

³ B 136.

⁴ B 135, B 138.

⁵ Sometimes for Kant intuitions are combined into ideas, but here ideas seem combined into one intuition (of an object). ⁶ B 138.

⁷ B 138. In B 135 Kant says that his analytic proposition shows the synthesis of the manifold to be necessary, because without it identity of self-consciousness could not be thought.

⁸ This is surely implied in Kant's statement that the principle would not apply to an understanding possessed of intellectual intuition. This statement is in both cases added to the assertion that the principle is analytic. See B 135 and B 138-9.

⁹ For 'human knowledge' we may prefer to substitute 'human thought' or even 'human understanding'. In B 135 the proposition in question seems to be a definition of understanding and in B 138 to be a definition of the synthetic unity of consciousness.

synthetic unity in the given manifold; or in other words that through the unity of apperception the manifold is united under the concept of an object.¹

One difficulty of such a contention is this. Even if we admit that an object is nothing more than a particular set of ideas conjoined in a necessary unity, this unity cannot be due to the unity of apperception; for the unity of apperception is surely present, and perhaps must be present, when we have no such necessary unity, and consequently when we have no object in the strict sense. Many ideas are connected in our mind, and could not be so connected unless our mind were one, yet we do not suppose that they are connected in the object; there is no objective connexion when we associate black cats with good luck, or when we suffer from toothache while listening to an orchestra.

This obvious objection Kant attempts to meet in a difficult passage,² in which he points out that the transcendental unity of apperception is an objective unity, and must be distinguished from the subjective unity of consciousness, described also as the empirical unity of apperception.

The subjective unity of consciousness is not to be found in the 'I think' which must accompany all our ideas of an object. It is on the contrary a determination of inner sense. Inner sense gives me a series of intuitions, and the order in which these intuitions come to me depends upon circumstances or upon empirical conditions.³ For example, ideas may be associated in my mind accidentally; one man associates a word with one thing, and another with something quite different.⁴ This accidental or contingent⁵ connexion of

¹ B 139. Kant says 'into a concept of the object'. ² B 139-40.

³ It is not clear whether 'circumstances' and 'empirical conditions' are meant to be the same or different. Kant mentions only 'association' by which certain ideas happen to come together in our mind, but I believe he is thinking also of physical stimuli which give us now one intuition and now another. See B 142 at the end.

⁴ B 140. Compare A 101.

⁵ The 'accidental' or 'contingent' (*zufällig*) does not exclude necessity. The contingent is that which is necessary *under a condition*. Everything contingent must have a cause. See B 289-90.

ideas in my mind is what Kant calls the subjective unity of consciousness.¹

The transcendental unity of apperception, on the other hand, involves more than a mere happening to combine different ideas in imagination.² It involves an 'I think', and to think is to think an objective connexion which does not depend on my subjective states.³ This is why the transcendental unity of apperception is said to be objective,⁴ and again to be objectively valid.⁵

The transcendental unity of apperception is 'original', while the empirical unity of apperception is 'derivative'; the empirical unity is derived from the transcendental under given conditions *in concreto*.

The meaning of this last assertion is not clearly explained. I believe that Kant's doctrine is roughly this: through the necessary relation of time (and all that is in time) to the transcendental unity of apperception, the order in which our ideas come to us—whether because of external stimuli or subjective association—is determined by causal law. It is in this sense that the subjective connexion of ideas in our minds is derived from, or conditioned by, the original synthetic unity of apperception.⁶

¹ The fact that he calls it also 'the empirical unity of apperception' supports the doctrine that empirical apperception is consciousness of what I suffer, that is, of my mental states, whereas pure apperception is consciousness of my act of thinking. See Chapter XXI § 2.

² I use 'imagination' to cover not only reproductive imagination (which Kant clearly has in view), but also the imagination which is present in 'apprehension' or 'sense-perception'. If we hear music and feel toothache at the same time, this is a subjective and accidental connexion, as is also the fact that we happen to see the front of a house before we see the back, although these coexist in the object.

³ B 142.

⁴ B 139.

⁵ B 140.

⁶ This difficult doctrine is, I think, present also in the Analogies, and Kant tries to work it out in detail in the *Opus Postumum*. It is connected with what Adickes calls Kant's doctrine of 'double affection'. In any case it should be clear that if we make our own mental history an object to ourselves, its unity, like that of any other object, must depend on the transcendental unity of apperception.

It should be added—though Kant is not too clear on this side of his doctrine¹—that I can judge my own subjective states. When I do so I make them an object, and affirm an objective connexion. The fact that I associate a word with a particular thing is an objective event in time, and it is causally determined by other events, some of which are physical. These causal connexions are, however, all dependent, according to Kant, upon the transcendental unity of apperception.

The essential point of § 18 is this: that the transcendental unity of apperception is an *objective* unity, inasmuch as it is the source of unity in *objects*. The reason for this is that it is the necessary unity of thinking,² and not merely a unity of what we may, perhaps not illegitimately, call imagination.³

§ 8. *Apperception and the Form of Judgement*

The next step which Kant takes is obvious. The synthesis of the manifold under the unity of apperception, a synthesis which is necessary if we are to have knowledge of objects, takes place by means of judgement. To say this is merely to expand the statement that the synthesis of which we speak is due to the understanding.

The subsection⁴ which establishes this point is concerned with the logical form of all⁵ judgements, according to Kant's own heading. As such, it belongs to Formal Logic, and attempts to connect the Transcendental Deduction with what has already been said in Section 1 of the Metaphysical Deduction.⁶

¹ His doctrine of judgements of perception in the *Prolegomena* § 18 (IV 298) seems to be incompatible with this view.

² A unity in thinking which is impossible apart from unity in what is thought or known. This unity in thinking is not conditioned, but ultimate or original.

³ Kant himself supports such a use in B 141, where he speaks of reproductive imagination, but I think that his view covers also 'apprehension', which is the work of imagination. Compare B 142. We might also put the distinction as one between the unity of thought or experience as such and the unity which belongs to the individual's thought or experience merely as the thought or experience of this individual.

⁴ § 19.

⁵ Not of analytic judgements only.

⁶ A 67-9 = B 92-4.

It should be compared with the discussion of judgement in Kant's own lectures on Formal Logic.¹

Kant refuses to define judgement as the representation of a *relation* between two *concepts*.² Such a definition has two faults. It refers only to categorical judgements, and it fails to indicate the nature of the relation. Ideas may be related by mere association in my mind, and this is certainly not judgement.

The first fault Kant corrects by substituting 'cognitions' or 'knowledges'³ for 'concepts'. This is a general word which covers both concepts and judgements. According to Kant, hypothetical and disjunctive judgements assert a relation, not of concepts, but of judgements.

The second fault Kant corrects by insisting that the relation asserted in judgement is an objective relation. Judgement is the way⁴ of bringing given *cognitions* to the *objective* unity of apperception.⁵

When I say 'The body is heavy', I am not saying merely that two ideas are associated in my mind, or have been frequently given together in intuition.⁶ I am saying that they are connected in the object, no matter what the state of my mind may be. The copula 'is' is intended to distinguish the objective unity of ideas from the subjective.⁷

¹ *Log.* §§ 17-40 (IX 101 ff.).

² This is the view of G. F. Meier and Baumgarten, except that Meier speaks of a 'logical' relation, and Baumgarten speaks of 'a relation of concepts as agreeing or disagreeing with one another'. These additions go some way to meet Kant's objection.

³ '*Erkenntnisse*.' I recognise the difficulty of finding a good English translation for this word, but Kemp Smith's 'modes of knowledge' seems to me even more than usually misleading in the present connexion.

⁴ '*Art*.' I think it would be better to say 'act'. Compare B 143.

⁵ B 141. Compare *M.A.d.N. Vor.* (IV 475 n.): 'Judgement is an act through which given ideas first become cognitions of an object'. Compare also *Log.* § 17 (IX 101).

⁶ This shows clearly that under the empirical unity of consciousness Kant includes ideas given together to sense, as well as ideas joined together by association.

⁷ This applies only to categorical judgements, whose form is the copula. See *Log.* § 24 (IX 105). The form of hypothetical judgements

The objective unity of ideas is the unity of ideas in an object. This unity involves necessity, but it must not be thought that the necessity is to be found in the ideas themselves as these are given to empirical intuition. The necessity is imposed upon them by the nature of thought. Such ideas belong to one another, not in themselves, but 'in virtue of the necessary unity of apperception in the synthesis of intuitions'.¹

This in turn implies that such ideas belong to one another, or are combined with one another, in accordance with certain principles which are necessary for knowledge of objects. These principles are derived from the unity of apperception. Since apperception is understanding, and understanding is the power or faculty of judgement, these principles are based on the forms of judgement, the ways in which given ideas are necessarily combined by thought. This is made explicit in the following subsection.

It should be noted that Kant is assuming throughout that judgement imposes objective unity, not only upon the *cognitions* (concepts or judgements) combined in judgement, but also upon the *intuitions* to which these cognitions refer.²

§ 9. *The Objective Deduction*

All that remains for Kant to do is to gather together the main points of the previous argument, to explain how the principles³ derived from the unity of apperception are bound up with the forms of judgement and the categories, and to draw the conclusion that the categories have objective validity.

This Kant does in a passage which he himself describes⁴

is the sequence or consequence (*Konsequenz*); the form of disjunctive judgements is the disjunction itself. See *Log.* §§ 25 and 28 (IX 105 and 106).

¹ It should be observed that, just as in the first edition, this necessity is present in *empirical* judgements which employ *empirical* concepts.

² Compare B 143 where this is stated explicitly. He must have in mind the synthetic unity imposed—according to the Metaphysical Deduction—upon intuitions, and not merely the analytic unity which is recognised by Formal Logic in its account of conception.

³ B 142.

⁴ B 159.

as the 'Transcendental Deduction'.¹ I have called it the 'Objective Deduction' because it is the Transcendental Deduction on its objective side.²

We saw in § 17 of the *Kritik*³ that the manifold of every intuition must be subject to the synthetic unity of apperception, because only so can the intuition have that unity which is necessary for it to be an intuition of an object. We saw in § 19⁴ that judgement is the act⁵ whereby the manifold of all given ideas (whether intuitions or concepts) is brought under the unity of apperception.⁶ Hence all the manifold, so far as it is given in *one* intuition,⁷ is determined by judgement,⁸ and therefore is determined in relation to one of the forms of judgement.

The categories are the forms of judgement, so far as the manifold is determined in relation to these forms.⁹ Therefore the manifold of given intuition must be subject to the categories,¹⁰ if the intuition is to have that unity which is necessary for it to be intuition of an object.

In other words, the categories necessarily apply to all objects given to sensuous intuition. They are, in short, objectively

¹ § 20. Kant includes § 21 also in the Transcendental Deduction, but § 21 is a restatement of the conclusion, and a review of the argument as a whole.

² The Transcendental Deduction on its subjective side is to be found in § 26, which also Kant entitles the 'Transcendental Deduction'.

³ § 6 of this chapter.

⁴ § 8 of this chapter.

⁵ Kant says that the *act* is the *function* of judgement. This is a loose use of terms, since the *function* (or form) of judgement is not the *act*, but the *unity of the act* of judgement. See A 68 = B 93.

⁶ That is, under the unity of apperception which is described as synthetic, objective, original, and transcendental.

⁷ Kant says *empirical* intuition, but his argument covers (in some sense) *all* intuitions (empirical and pure). See B 137-8.

⁸ Or by the general function or form of judgement. Kant as usual passes from the function to the functions, and from the form to the forms, of judgement. See A 70 = B 95.

⁹ B 143. Compare B 128 and *M.A.d.N. Vor.* (IV 474 n.).

¹⁰ This assumes that what is determined in relation to one form of judgement is necessarily capable of being determined in relation to all forms of judgement.

valid. This is what the Transcendental Deduction was required to prove.¹

§ 10. *Ambiguity of the Word 'Given'*

There may seem to be inconsistency in the statement that the manifold, so far as it is *given* in *one* intuition, is determined in relation to a form of judgement. Elsewhere² intuition is said to be given independently of thought and its forms.

The inconsistency is, I think, merely verbal. The word 'given' can be used as a relative term. Any idea, whether intuition or concept, can be 'given' in relation to further processes of thought.³ Thus from the point of view of Formal Logic the cognitions (concepts or judgements) combined in judgement are taken as given.⁴ Formal Logic always takes cognitions as given, for it makes no enquiry into their origin.⁵

An intuition given independently of thought is given in the strictest sense, and is a mere multiplicity without unity.⁶ An intuition which is given *as a unity* is given only in a relative sense, and it is so given, as Kant says expressly, only because it has been united by thought.⁷

This does not mean that intuition is first given and then thought. It means that if we abstract from the element of thought, we find a mere manifold without unity. Synthesis is necessary for the unity of an intuition, whether the intuition be empirical or pure.⁸

¹ A XVI, A 85 = B 117, A 89 = B 122. Note Kant's clear summary of the Deduction in the first sentence of B 144 and the footnote.

² E.g. A 89 = B 122, B 132, B 145.

³ A 56 = B 80; *Log.* § 4 (IX 93).

⁴ See the definition of judgement in B 141.

⁵ A 56 = B 80. In *Log.* § 4 Kant speaks of empirical concepts and even of notions (categories) as *given*, the first *a posteriori*, the second *a priori*.

⁶ If we abstract still further, and consider it as contained in a moment of time, it would seem to be absolute unity without multiplicity. See A 99 and compare Chapter XIX § 1.

⁷ B 130. Compare B 161 n., and especially the very clear statement in B 144 n. In B 161 unity of synthesis is said to be given along with (although not *in*) intuitions.

⁸ B 136 n., B 137-8.

CHAPTER XXIX

THE SUBJECTIVE DEDUCTION

§ 1. *The Categories and Human Experience*

The Objective Deduction has, Kant believes, demonstrated the objective validity of the pure categories for every intelligent finite being. Intelligent finite beings are only parts of a wider universe, and their thinking does not make the world which they have to know. All finite thinking, so far as it is about something other than itself, must have objects given to it from without; and so far as objects are merely given, they are given to a passive capacity for receiving impressions. Such a passive capacity Kant calls sensibility, and of such sensibility our human sensibility is an example, the only example with which we are acquainted. Other kinds of sensibility might receive altogether different impressions, and might not be subject to the forms of space and time. The pure categories would nevertheless be applicable to an experience which depended upon any kind of sensibility, since (1) intuitions¹ given to passive sensibility could never, apart from thinking, possess unity,² and so could never be intuitions of an object, and (2) thinking must always have the same forms,³ and must therefore use the same categories.

On this view the pure categories are not limited to *human* experience, as are the forms of time and space.⁴ Hence so far

¹ It is important to note that Kant everywhere (not merely in the second edition) opposes *intuitions in general* to *human* intuitions, to *our* sensuous intuitions, objects of *our* senses and so on.

² The plausibility of this is greater when sensibility receives intuitions successively.

³ Kant has been criticised for assuming this, but it is difficult to understand how an activity with quite different forms could be called thinking at all. Nevertheless for the sake of completeness Kant should at least have raised the question whether there could be thinking with different forms.

⁴ Even time and space need not be so limited, but we cannot say that they must be forms of all sensibility.

as *thought* is concerned, the categories are not limited to human intuitions given under the forms of time and space, but have an unlimited field.¹ These wider possibilities have, however, no meaning for us. For us the categories are quite empty, they are mere forms of thought giving us no *knowledge* of objects, unless they are applied to a manifold given in time and space.

Kant is careful to explain that for an infinite intelligence having no reality beyond itself the categories would play no part. They are required only for an intelligence whose objects are given to sensibility from without. In an infinite intelligence there would not be this divorce between thought and intuition. Its intuitions would be intellectual, not sensuous; and its understanding would be intuitive, not discursive.

These speculations are introduced by Kant primarily in the interests of his moral philosophy.² They are much more prominent in the second edition,³ but they are found also in the first edition.⁴ For our present purposes the importance of such doctrines is this—that the categories can give us *knowledge* only if they are related to the manifold of intuition through the forms of space and time. In other words, the categories do not give us *a priori* knowledge of objects, except in so far as they are schematised.

If we are to show how the pure categories involved in all thinking *quâ* thinking⁵ are to give us *a priori* knowledge of objects, we must explain their relation to the form of time and the transcendental synthesis of imagination. This is the question which belongs to the Subjective Deduction, and apart from this the Objective Deduction is manifestly incomplete.⁶

¹ B 166 n. Compare B 148. This is the doctrine condemned by Vaihinger as pre-Critical in A 88 = B 120. ² See B 166 n.

³ E.g. B 72, B 135, B 138–9, B 145, B 149, B 153, B 157, B 159, B 308.

⁴ E.g. A 35 = B 52, A 252, A 256 = B 311–12.

⁵ An intuitive understanding would not think, it would know; for in it there would be no separation between conception and intuition.

⁶ B 144. This suggests that what I have called the Objective and Subjective Deductions in the second edition differ from the Objective and Subjective Deductions described in the first edition, for there

§ 2. *The Objective and Subjective Deductions*

Kant explains the distinction between the two halves of the Transcendental Deduction in a passage of unusual clarity.¹

In the Objective Deduction, he points out, it is assumed only that finite thinking must have a manifold given to it in intuition prior to thought and independently of thought.² This manifold (the manifold of an *intuition in general*³) must have unity if there is to be intuition of an object;⁴ it must be synthesised by the understanding, and so brought under the unity of apperception and the pure categories.⁵

In all this no account is taken of the way⁶ in which the manifold must be given; that is to say, no account is taken of the form of *human* intuition.⁷ We have still to show how the unity of the manifold of an *intuition in general*, a unity thought in the pure categories, can be identical with the unity of *our* empirical intuitions given under the form of time.⁸

the Objective Deduction was said to be alone essential to his purpose; see A XVI-XVII. One might suppose that in the first edition time belonged to the Objective Deduction, while imagination belonged to the Subjective Deduction. This is not, however, borne out by the passage in A 92-3 = B 124-6 (which is mentioned in A XVII as sufficient by itself on the objective side of the Deduction); for the argument there does not depend on time. It seems to me that a division which was a little uncertain in the first edition becomes clear and definite in the second.

Although it is convenient to speak, as Kant does, about a Subjective and an Objective Deduction, we must not forget that this is only a way of referring to the subjective and objective sides of one Transcendental Deduction.

¹ § 21. Compare also B 160-1.

² B 145. Compare A 91 = B 124, where the same doctrine has been alleged by Vaihinger to be pre-Critical.

³ It is called the manifold of a *given* intuition in general in order, I believe, to show that it does not include intellectual intuition.

⁴ B 144 n.

⁵ B 144.

⁶ 'Art.' Kemp Smith translates this as 'mode'.

⁷ Namely time and perhaps also space.

⁸ The second unity is simply the first unity applied to *our* sensuous intuitions; see B 161. Since our intuitions are given independently of thought and its categories, we have to show *how* the principles of synthesis necessarily involved in judgement as such can determine

Kant will argue that because our empirical intuitions are given to us under the form of time, they must be subject to a transcendental synthesis of imagination which imposes on them unity in accordance with the categories.¹

Only in this way can we explain *how* the categories apply *a priori* to objects of our human senses, and this is necessary in order to complete the Transcendental Deduction. Our proof that the categories must apply to objects of *intuition in general* is only the beginning, or the first stage, of the Transcendental Deduction.² We know *that* our intuitions, like all others, must conform to the categories, if they are to be intuitions of an object; but we have still to understand *how* they do so.³

§ 3. *Framework of the Subjective Deduction*

In the Subjective Deduction the most important passages are the beginning of § 24 and the whole of § 26.

The two introductory subsections show that for us the categories apply only to objects of experience—that is, to objects given in empirical intuition under the forms of time and space—and not to things-in-themselves (§§ 22–3).

Kant then proceeds to the subjective side of the Deduction. Because time and space are the pure forms of human intuition, there is possible a transcendental synthesis of imagination which determines the given manifold in accordance with the unity of apperception and the categories (§ 24)⁴.

the combination of our intuitions: we know only *that* they must do so, if we are to have knowledge of objects.

¹ This subjective side of the Deduction is a necessary preparation for the Schematism of the Categories.

² In view of the fact that the subjective side of the Deduction has been completely ignored in the second edition, the surprise of some commentators at this statement is a little difficult to understand; see for example Ewing, *Kant's Treatment of Causality*, p. 61, and Kemp Smith, *Commentary*, p. 289.

³ We understand this only because they are given in time. In *M.A.d.N. Vor.* (IV 474 n. ff.) a similar distinction is made between '*that*' and '*how*', but time (curiously enough) is brought under the '*that*', while the '*how*' does not even bring in imagination, but argues direct from the nature of judgement. This suggests that the distinction of '*that*' and '*how*' was not clear in Kant's mind.

⁴ B 150–2.

This is followed by an account of the unity of apperception in relation to inner sense and the form of time (§§ 24-5).¹

The essence of the Subjective Deduction is to be found in § 26. There Kant attempts to show how our human intuitions must fall under the categories if we are to know objects in one common space and time. He illustrates his contention by examples falling under the categories of quantity and causality. Finally he discusses the relation between the *a priori* laws or principles governing the whole of nature and the particular (or special) empirical laws which we discover by observation and experiment.

The last subsection² gives us a general review of the whole argument.

§ 4. *Limits of Knowledge Through the Categories*

For knowledge (as opposed to thought) we require (1) intuition and (2) a concept or category.³ If no intuition is given corresponding to our concept, we are left with only a form of thought which thinks nothing real.

Since human beings have no intellectual, but only sensuous, intuitions, they can have knowledge only when the categories are applied to sensuous intuitions.

Human intuitions are either empirical or pure, and it might seem that an object might be given in pure, as well as in empirical, intuition. In a sense this is true. In mathematics we can apply the categories to pure intuitions,⁴ and so obtain *a priori* knowledge of objects.⁵ Such mathematical knowledge is, however,

¹ B 152-9. This I propose to reserve for discussion later, as it does not seem essential to the argument; see Chapters LII-LIII. ² § 27.

³ B 146. We *may* use other concepts also, but whether we do so or not, we *must* always use a category, if we are to know an object.

⁴ This seems to be Kant's meaning, though the only category which we obviously apply in *pure* mathematics is the category of quantity (and perhaps the category of possibility). Kant mentions categories in the plural a little lower down in B 147.

⁵ They are objects only by courtesy: objects strictly are concrete *things*, and Kant here uses the word 'thing' to distinguish real objects from the pseudo-objects of mathematics.

knowledge of the forms of objects, rather than of objects themselves. It can be considered knowledge of objects, only if we assume that objects are given to our senses in space and time and must therefore possess the spatial and temporal characteristics which we study in mathematics.¹

Strictly speaking, therefore, the categories give us knowledge only if they are applied to empirical intuition. Hence although by means of the categories we possess *a priori* knowledge, this knowledge tells us only what an object must be, if it is an object of possible *experience*. Experience itself is empirical knowledge, that is, knowledge of objects given to empirical intuition.²

On this principle a limit is set to the application of the categories, just as a limit was set in the Aesthetic to the application of space and time.³

§ 5. *The Categories and Non-human Intelligence*

The limits of the application of the pure categories are theoretically wider than those of space and time; for the pure categories must play their part in the experience of any finite intelligence dependent on any kind of sensibility, while space and time need not extend beyond human experience.⁴

This is a purely speculative possibility which we can afford to ignore. For *us* the categories have sense⁵ and significance, only in so far as objects are given to our senses under the forms of space and time. *We* are incapable of attaching any real meaning to the idea of objects given to another kind of sense under another form of sensibility, nor can *we* understand—

¹ Compare also A 239–40 = B 299.

² Compare B 218: 'Experience is *empirical* knowledge, that is, knowledge which determines an object through *sense-perception*'.

³ B 148.

⁴ In B 148 Kant assumes that space and time *would* not do so, but in B 72 he recognises that this is not necessarily true.

⁵ There is perhaps a play upon words in this double use of 'sense' (*Sinn*), which Kemp Smith's translation 'body' fails to bring out. Compare also A 155 = B 194 and A 240 = B 299.

except by analogy—how the pure categories could apply to such objects.

If we consider the still more remote possibility of an intelligence possessed of intellectual intuition, we can say that no spatial or temporal predicate could apply to the objects of its knowledge.¹ Such negative characterisation gives us no positive knowledge of these objects. Furthermore, the categories themselves, even in their pure form, could not be applied to such objects; for even if we think such an object by means of the categories, we cannot in the absence of empirical intuition know that there is anything which can correspond to our thought.²

§ 6. *The Categories and the Form of Time*

We now approach³ the special problem of the Subjective Deduction.

The categories whose objective validity has been demonstrated are the pure categories, mere forms of thought (or of judgement) involved necessarily in the nature of understanding itself, and called for this reason pure concepts of the understanding. They differ from forms of thought only in this, that the forms of thought treated in Formal Logic are considered

¹ The reason for this is that space and time are essentially bound up with sense.

² Kant, I think, believes that the object of intellectual intuition would be the thing-in-itself. His view is always that since we can think only by means of the categories, we can think things-in-themselves only by means of the categories, but in the absence of intuition such thinking is not knowledge. We must, for example, think of a thing-in-itself under the category of substance, and therefore as something which can exist as a subject, but never as a mere predicate. But once we exclude all temporal and spatial reference from the category, it becomes meaningless—in the sense that we have no idea whether there could be an object corresponding to this thought. The category of substance gives us knowledge of objects only when it is applied to the permanent in space and time, that is, to things as they must appear to us, not as they are in themselves. See also Chapter II § 4 and Chapters LIV–LVI.

³ § 24. Kant's heading for this subsection is 'The application of the categories to objects of the senses in general'. This is misleading unless '*the senses in general*' can be taken to mean '*human senses*'.

simply as forms of thought, whereas the categories are forms of thought considered as determining an object given to some sort of sensuous intuition.¹ As such the pure categories are concepts of an object in general, and through them no determinate object is thought.²

To say this is, according to Kant, to say that they are concepts of the synthesis which is necessarily involved in knowing any and every object given to any kind of sensuous intuition. This synthesis is the synthesis which is present in the form (or forms) of judgement. As such it is purely intellectual, and wholly independent of the nature of the matter judged. It is transcendental, since (1) it has its origin in the nature of understanding itself, and (2) it is the source of *a priori* knowledge, namely of that *a priori* knowledge which is due to the understanding.³

What Kant has now to explain is how the manifold given to human intuition must conform to these intellectual syntheses involved in the very nature of thought. The difficulty of the Deduction depends on the relative independence of thought and intuition, such that intuitions are given to us independently of thought, and thought has its own forms which have nothing to do with the nature of what is given to us in intuition.⁴

We have already seen *that* intuitions cannot be intuitions of an object, unless they conform to the pure categories. We have now to explain *how* they must conform to the categories, because of the special character of human experience.

¹ Riehl (*Der Philosophische Kriticismus*, Vol. I, p. 358) says truly that the difference between categories and forms of judgement is one, not of essence, but of application.

² For a determinate object we require both thought and intuition, and neither thought apart from intuition nor intuition apart from thought can give us a determinate object; see A 258 = B 314. For the indeterminate object of intuition, see A 20 = B 34. The concept of an object in general is said in A 251 to be determinable through the manifold of appearances.

³ The pure forms of sensibility are also sources of *a priori* knowledge. Neither sensibility nor understanding is, however, a source of knowledge apart from the other; they are sources of different elements in *a priori* knowledge.

⁴ Compare A 88 = B 121 ff.

Kant's explanation turns on the fact that the manifold of intuition must, in human experience, be given under the form of time. The universality and necessity of the form of time will enable us to understand how the activity of the mind can determine, in accordance with the synthetic unity of apperception, the manifold which is given in inner sense.¹

When we grasp the part played by time as the form of all human intuitions, we shall be able to understand how the necessary synthetic unity of the manifold of *intuition in general*² (which we think *a priori* in the pure categories) can be the condition to which all objects of *human* intuition must necessarily conform; we shall also be able to understand how the pure categories (which in themselves are mere forms of thought) can acquire objective reality, that is, how they must apply to objects of *human* intuition. This in turn means that the categories can apply to objects only as appearances (not as things-in-themselves); for, as we saw in the Aesthetic, the fact that we have an *a priori* intuition of time implies that time is due, not to things, but to our sensibility, and consequently it implies

¹ B 150. Kant says 'can determine inner sense through the manifold of given intuitions'. He must, I think, mean inner sense *as regards its form*; compare B 152 and B 155. The statement is a difficult one; it seems to suggest that in order to determine time in accordance with the categories we must combine the empirical manifold in time in accordance with the categories, and this I believe to be Kant's view.

² B 150. Kant's own statement is more elaborate. What we think *a priori* is said to be 'synthetic unity of the apperception of the manifold of sensuous intuition'. In this phrase, as so often, the synthetic unity of apperception and the synthetic unity of the manifold seem to be identified, and indeed the phrase is a portmanteau phrase which combines them both in one. 'Sensuous intuition' I take to be sensuous intuition in general.

Kemp Smith attaches '*a priori*' not to 'thinking' but to 'sensuous intuition'. On this interpretation Kant is saying that understanding can think the *schematised* categories as conditions of all objects of human intuition. This does not seriously alter the argument, but I believe Kant is explaining how understanding can think the *pure* categories as conditions of all objects of human intuition.

that appearances given under the form of time are not things as they are in themselves, but are things only as they appear to us.¹

§ 7. *The Transcendental Synthesis of Imagination*

Kant at first speaks as if understanding itself² determined (or synthesised) the manifold of inner sense in accordance with the unity of apperception and the categories. He now explains that this synthesis of the manifold under the form of time³ is due to imagination.⁴ It is a figurative synthesis (*synthesis speciosa*), as opposed to the purely intellectual synthesis (*synthesis intellectualis*) which is present in the form of judgement, and thought in the pure category.⁵

This figurative synthesis, like the intellectual synthesis to which it conforms, is a transcendental synthesis;⁶ it is not only itself *a priori*,⁷ but is also the condition of the possibility of *a priori* knowledge.⁸ So far as it is transcendental it is not concerned with differences in the given manifold, but is directed⁹ only to the unity thought in the categories,

¹ B 151. Kant's affirmation of this is too brief to be wholly clear. He says 'it is only of appearance that we can have *a priori* intuition'.

² B 150. This must be understanding as a power of *knowledge*, not merely as a power of *thought*. See A 97.

³ The understanding in itself has nothing to do with time. Compare A 152-3 = B 191-3.

⁴ Imagination may, however, be understanding at a lower level. See B 162 n.

⁵ Compare A 118. The synthetic unity of the manifold under the unity of apperception 'presupposes, or includes' a pure transcendental synthesis of the imagination. As to the word 'figurative' (*figürlich* or *speciosa*) I do not see that it adds anything to the word 'imaginative'.

⁶ B 151.

⁷ That is, necessarily and universally present when we know any object in time. As such it is, on Copernican principles, due to the nature of the mind itself.

⁸ Apart from the transcendental synthesis of time the Principles could not be demonstrated.

⁹ B 151, '*geht*'. In A 118 the synthesis is said to be transcendental if it is 'directed' (*geht*) only to the *a priori* combination of the manifold. The doctrine is expressed more clearly in A 123. The transcendental

here identified with the original synthetic unity of apperception.

Kant makes perfectly clear what seems to me to be beyond dispute, that the transcendental synthesis of imagination works through the medium of time. It determines sense *in accordance with its form*, that is to say, in accordance with time.¹ It does so in conformity with the unity of apperception, and therefore in conformity with the categories.²

Imagination itself is given an intermediate position between sense and understanding. It is a power to represent an object in intuition, even when the object is not present. In this way it is connected with³ sensibility, since human intuitions are sensuous.⁴ None the less the synthesis of imagination is always an exercise of spontaneity.⁵ It is what determines, not what is determinable (as sense is); or, in other words, it is a source of form, while sense is a source of matter.⁶

Imagination is in the service of understanding when it synthetises the manifold in accordance with concepts; and the transcendental synthesis of imagination is in the service of pure understanding when it synthetises the manifold in time in accordance with the categories. Hence this transcendental

synthesis 'aims at' (*zu ihrer Absicht hat*) nothing but necessary unity in the synthesis of the manifold. Compare A 125 and Chapter XXV § 9. Even in A 101 the transcendental synthesis of imagination (said to be reproductive) is the *ground* of a necessary synthetic unity of appearances.

¹ B 152. Similarly in B 150 understanding determines *inner* sense, because inner sense has an *a priori* form.

² The transcendental synthesis is said to be productive, and not reproductive. The transcendental synthesis of imagination is governed by the categories, while the synthesis of reproductive imagination is governed by the empirical laws of association. Compare A 123 and Chapter XIX § 3.

³ Kant says 'belongs to' (*gehört*).

⁴ Compare A 120 n. where imagination is said to be an ingredient in sense-perception. In the present passage Kant says that imagination alone can give to the concepts of the understanding a corresponding intuition. Compare A 99.

⁵ Sense is merely passive.

⁶ See A 266 = B 322.

synthesis¹ is the first working² of understanding upon sensibility, and the first application³ of understanding to objects of *human* experience.⁴ Nevertheless as a figurative synthesis it is to be distinguished from the purely intellectual synthesis which is to be found in the forms of judgement (or the pure categories) independently of imagination, and which belongs to understanding alone.⁵

In this way imagination seems almost to become a lower manifestation of understanding itself acting directly upon intuitions given under the form of time. This is stated explicitly later.⁶ The empirical synthesis of apprehension (which is the work of imagination) must conform to the synthesis of apperception, that is, to the purely intellectual synthesis contained in the pure category.⁷ It is *one and the same spontaneity* which there under the name of imagination, and here under the name of understanding, introduces combination into the manifold of intuition.⁸

§ 8. *Aim of the Subjective Deduction*

In § 26 we have the essence of the Subjective Deduction.⁹

Kant begins with his usual introduction, summarising what

¹ I agree with Kemp Smith's translation, though the text '*welches*' seems to me odd, if it is correct.

² B 152, '*Wirkung*'. Compare B 164. Imagination depends upon understanding as regards the unity of its intellectual synthesis, and depends upon sensibility as regards the manifold of apprehension.

³ Compare A 77-8 = B 103.

⁴ 'to the objects of *our* possible intuition.'

⁵ The intellectual synthesis thought in the pure category concerns only the manifold of intuition *in general*: it has in itself no reference to time; compare B 151.

⁶ B 162 n.

⁷ Compare A 108, A 114, and B 164.

⁸ In A 97 spontaneity is said to be the source of the threefold synthesis.

⁹ Kant's own heading is 'Transcendental Deduction of the universally possible employment in experience of the pure concepts of the understanding'. This heading is not very apt, unless 'experience' can be assumed to mean '*human* experience'.

has gone before.¹ We have proved that the categories, whose *a priori* origin was shown in the Metaphysical Deduction, give us *a priori* knowledge of objects of intuition *in general*. We have now to show that they give us *a priori* knowledge of objects of *human* intuition.²

In so doing we shall be concerned, not with the form of intuition under which objects are given, but with the laws of combination imposed on them if they are to be thought as objects. We have to explain how understanding prescribes laws to nature, and so makes nature possible.³ Unless we can do this, we shall never understand how everything that is offered to our sense must be obedient to laws which have their origin in the human understanding.

§ 9. *The Synthesis of Apprehension*

The argument starts from the synthesis of apprehension. This is defined as the combination of the manifold in one empirical intuition, whereby sense-perception—that is, empirical consciousness of the intuition (as *appearance*)—is possible.⁴

Sense-perception by itself gives us consciousness of appear-

¹ B 159. Although § 26 is headed 'Transcendental Deduction', he asserts that the Transcendental Deduction is to be found in §§ 20–1. Both are transcendental deductions, but the former was concerned with the objective, and the present with the subjective, side of the Deduction. This is, I think, the only place where Kant uses the phrase 'Metaphysical Deduction'.

Incidentally, the presence of little introductions even in the second edition suggests that this is a natural characteristic of Kant's style, and requires no further explanation such as the patchwork theory attempts to offer.

² This will be an answer to the question 'How can the power of thinking give us *a priori* knowledge?'—see Chapter XVIII § 4; for, strictly speaking, *a priori* knowledge of objects of intuition *in general* is not knowledge until we can indicate the nature of the intuitions so described.

³ For the two senses of nature, see B 163 and B 165 and § 15 below.

⁴ B 160. This is, I think, the same as the empirical synthesis of apprehension in A 99 and A 120. It must include in itself the empirical synthesis of reproduction. Compare A 102 and A 121.

ances, not of objects.¹ None the less sense-perception is in a particularly close relation with objects, since it involves sensation;² for sensation (although it is only a subjective modification of the mind³ and not the idea of an object⁴) presupposes the actual presence of the object.⁵ Furthermore the synthesis of apprehension gives unity to our intuitions, it is conditioned by the transcendental synthesis of time, and when it is brought to concepts or judged, we have knowledge of objects.⁶

The precise meaning of sense-perception or apprehension is, as usual,⁷ not too certain, but as we find Kant talking later of perceiving a house,⁸ we must not suppose that it is to be restricted to consciousness of a mere sensum.⁹

§ 10. *Apprehension Involves Space and Time*

Kant's next point is this. Space and time are forms of all intuition, and therefore the synthesis of apprehension, since it combines the given manifold in one intuition, must do so in conformity with space and time.¹⁰

I take this to mean simply that the synthesis of apprehension combines the manifold in time and space, or in other words that the given manifold appears to us as combined in time and space, because (and only because) of our act of synthesis.

¹ Compare B 134-5, B 234; and also A 92 = B 125, A 103, and A 120-1.

² B 207, '*Empfindung*'.

³ B 207. Compare A 320 = B 376.

⁴ B 208.

⁵ A 50 = B 74. Sensation is caused by an object in space. This may be the meaning of A 19 = B 34. See *M.A.d.N. Vor.* (IV 476) when the outer senses are said to be affected only by motion.

⁶ A 78 = B 103.

⁷ See Chapters XIX § 2 and XXVI § 2.

⁸ B 162. In the same passage we are said to perceive the freezing of water. In these cases it is obvious that apprehension and sense-perception involve reproduction.

⁹ Compare Chapter XIX § 2. One would like to know whether there is a synthesis of apprehension present in dreams. I am inclined to think not, because the actual presence of the object is not presupposed in dreams. There must, however, be at least something analogous to the synthesis of apprehension even in dreams and in the imagination of the artist.

¹⁰ B 160.

The reason by which Kant supports his contention offers some difficulty. He says that this must be true 'because the synthesis itself can take place only in accordance with this form'.¹ 'This form' appears to be used generally in order to cover both the form of space and the form of time.² If so, Kant is saying merely that the synthesis of apprehension must conform to space and time, because unless it does so it cannot take place at all.³

§ 11. *Space and Time Involve Unity*

If the synthesis of apprehension combines the manifold in time and space, it presupposes a synthesis—a transcendental synthesis—of the one time and space in which the manifold is combined. This synthesis has already been discussed,⁴ but Kant, in accordance with his curious methods of exposition,⁵ proceeds to make his point without any explicit reference to the transcendental synthesis of imagination.

Space and time as forms of intuition are a mere multiplicity without unity. It is only as pure intuitions that they possess unity.⁶ This necessary unity was treated in the Aesthetic as if it belonged to space and time in their own right,⁷ but space and time, as pure intuitions, possess unity only because

¹ Kemp Smith translates '*nur nach dieser Form*' as '*in no other way*'.

² In A 93 = B 125 the formal 'condition' (*Bedingung*) of sensibility is used in the singular to cover both space and time, but there are reasons for this in the context. 'This form' can hardly be intended to refer to time alone or to the fact that the synthesis of apprehension is itself successive.

³ We might perhaps say that because space and time are forms of intuition, we cannot synthetise a given manifold without synthetising also the space in which, and the time during which, it is given. Kant, I take it, is here concerned only with the particular times and spaces in which appearances are given; in the next paragraph he passes to the doctrine that there is only one time and space of which particular times and spaces are parts.

⁴ B 150 ff.

⁵ At crucial points in the argument he almost invariably leaves us to fill in some of the steps by a recollection of what has gone before. Compare A 93 = B 126, A 111, A 124-5.

⁶ B 160.

⁷ Because Kant there treats sense in abstraction from thought.

they presuppose a synthesis which does not belong to sense at all.¹

Unity is therefore given *along with*² the pure intuitions of space and time, but it is not given *in* these intuitions.³ This unity of time and space is an *a priori* condition of the synthesis of apprehension. That is to say, everything that is to be represented determinately⁴ in time and space must conform to this necessary unity (or necessary combination) which is involved in the nature of time and space themselves.

If we put this in less technical language, we may say that because there is only one time and one space, the manifold given must be synthetised in such a way that it can appear in one time and one space. The whole argument of the Analogies turns on this contention.

The full implications of this will not become clear till we come to the Principles. The word 'determinately' in the above assertion is of importance. Even appearances in dreams are spatial and temporal, but they have not a determinate position in one common space and time. It is this determinate position which is the mark of real objects, and of real objects alone.⁵

§ 12. *The Subjective Deduction*

We now come to the contention on which the whole argument turns. As so often in Kant, it is compressed into a single sentence.

The necessary synthetic unity which must belong to all the manifold of *human* intuition, if the manifold is to be combined in one space and time, is identical with that necessary synthetic

¹ B 160-1 n. This synthesis is presumably the transcendental synthesis of imagination, but Kant does not think it necessary to say this. Ultimately the intellectual synthesis thought in the pure categories is also presupposed.

² B 161, '*zugleich mit*'. Perhaps this means 'simultaneously with', but I prefer to keep a neutral phrase.

³ It is not given in the intuitions, because it is imposed on the intuitions by the transcendental synthesis. ⁴ '*bestimmt*.'

⁵ The word 'determinately' perhaps suggests also that the manifold is 'determined' in accordance with the categories. Compare B 128-9.

unity of the manifold of a given intuition *in general* which is involved in the transcendental unity of apperception and thought in the pure categories.¹ The only difference is that the unity of an intuition in general is now applied to, or manifested in, our human intuitions which are given under the forms of time and space.

With this doctrine we are already familiar. It is another form of the contention that the transcendental synthesis of imagination, which is the condition of synthetising the given manifold in one space and time, is a synthesis in accordance with the unity of apperception and the categories.

If this is true, the synthesis of apprehension necessary for sense-perception must conform to the categories.² And since human experience is knowledge by means of connected sense-perceptions,³ the categories are *a priori* conditions of the possibility of such experience. They are consequently valid *a priori* for all objects of human experience.

The question is whether this fundamental contention is, or is not, true. Kant's theory of the forms of judgement makes him confident that it must be true, but this ground of confidence we can hardly share. His argument is, however, not yet at an end. He intends to show that corresponding to each pure category there is a schema, or a transcendental determination of time.⁴ He also believes he can prove that these schemata are necessarily involved in all experience of objects in one common space and time. For the present he gives us two illustrations of his meaning, a concession which he did not make in the first edition.

¹ B 161. It is thought in the pure categories because it is thought in the forms of judgement. Compare also B 144-5.

² Kant is presuming that sense-perception, though it gives us only appearances, gives us appearances united in one space and time, and so capable of being thought as objects. It is more than a mere association of ideas.

³ Compare A 97.

⁴ A 139 = B 178.

§ 13. *The Category of Quantity*

His first illustration concerns the category of quantity.¹ When I perceive a house,² the necessary unity of space, and consequently of the manifold³ in space, is presupposed. More simply, I presuppose that the house occupies a part of the one common⁴ space in which all objects are. In combining the successively given⁵ appearances into one intuition of a house, I as it were draw the shape of the house in conformity with the necessary⁶ synthetic unity of the manifold in space.⁷ This necessary synthetic unity to which the synthesis of apprehension must conform is identical—when I consider it in abstraction from the form of space—with the necessary synthetic unity thought in the category of quantity, or more strictly in the category of totality.

At the present stage of the argument there should be no great difficulty in seeing the plausibility of this contention. The reason for it is that in the category of totality⁸ we think the synthesis⁹ of the homogeneous in an intuition *in*

¹ B 162.

² Kant is assuming that what is perceived is a real object. For knowledge of such an object thought is necessary as well as the synthesis of apprehension, but the special point Kant is making is that sense-perception (or the synthesis of apprehension) must itself conform to the categories of the understanding.

³ I take this manifold to be the empirical manifold of all outer intuition. Kant describes it as 'outer sensuous intuition in general'. It is perhaps just possible that Kant may mean the pure manifold.

⁴ One objective space is assumed to be common to all men as well as to contain all bodies.

⁵ I may, and probably do, supplement the given appearances with others added by imagination, but it is not necessary to take these into account for purposes of the argument.

⁶ I introduce the word 'necessary', because the 'synthetic unity' mentioned here is the same as the 'necessary unity' mentioned above.

⁷ That is to say, I draw its shape as a part of the one common space and so as having necessarily the characteristics which belong to such parts of the one common space.

⁸ Derived from the form of judgement 'All S is P'. Unity and plurality are both involved in the category of totality. See B 111.

⁹ Or the synthetic unity.

general.¹ In synthetising space we are synthetising the homogeneous; for space is essentially homogeneous, and every particular space is made up of spaces. The synthesis of the pure manifold of space is involved in the synthesis of apprehension whereby we perceive a house. Consequently in perceiving a house we are synthetising the manifold under the category of quantity.

Whatever else the house is, it must be composed of parts outside one another in space, and these parts, so far as they are spatial, are necessarily homogeneous. They can be divided into so many feet or inches.² In this way the house must be an extensive quantity.

We can therefore understand, not only *that* the category of quantity must apply to all objects—this is true for Kant because of his theory of the forms of judgement—but also *how* it necessarily applies to all objects given in human intuition under the forms of space and time.³

§ 14. *The Category of Causality*

Kant's contention becomes much more difficult, when we pass to his second illustration, which is an instance of causality.⁴

When I perceive the freezing of water, I apprehend two states (fluidity and solidity)⁵ as standing in a temporal relation to one another. If these two states are to be objectively determined⁶ (as regards their time-sequence), they must have a

¹ As I have suggested—see Chapter XIV § 8—this is implied not merely by the form of the universal judgement, but by all conception as such.

² For this reason they must be measurable, not only in relation to one another, but also in relation to all other objects in space.

³ The argument for time is precisely similar to the argument for space. The fact that Kant takes space, rather than time, to illustrate his meaning is typical of the second edition, though by no means absent from the first.

⁴ B 162.

⁵ Kant, as often, avoids the simple case of causality where of two successive events the first is cause and the second effect.

⁶ Note the word '*bestimmt*'. Compare B 161 and § 11 of the present chapter. Kant is distinguishing an objective succession of events from a subjective succession such as takes place when I see the parts

determinate position relatively to one another in one common time.¹ They can have this position, Kant believes, only if they are causally determined, which in a more simple case than this would mean that the first event is the cause of the second.² Hence there must be a necessary synthetic unity, or a causal connexion, wherever we perceive successive events in time. This necessary synthetic unity, when we abstract from the time element, is identical with the necessary synthetic unity thought in the pure category which Kant calls cause and effect. It ought strictly to be called the pure category of ground and consequent, since it has no reference to time.³

We are not in a position to estimate this contention until we have examined the Second Analogy.⁴ If it were true, Kant would have shown *how* the pure category of ground and consequent must apply to all objects given in human intuition under the form of time.

Similar illustrations could be given for all the other categories.

§ 15. *Understanding as Lawgiver*

Kant's final conclusions add little to what he has said in the corresponding passage of the first edition,⁵ with which this passage⁶ should be compared.⁷

of a house one after another, although there is no corresponding change or succession in the house. See A 190-1 = B 235-6.

¹ Objective time must be one and the same for all men and all events.

² In the example actually given this is not the case, but the freezing of the water is determined by some non-specified cause.

³ It is derived from the form of judgement 'If A, then B'.

⁴ The reason why his argument is not obvious, as in the first illustration, is that in the case of quantity we have intuitive certainty, but in the case of causality we have only discursive certainty; see A 161-2 = B 201 and A 180 = B 223. Nevertheless we can see that the synthesis of cause and effect is the synthesis of a ground which precedes its consequent in time, and when we consider it in abstraction from time it is identical with the synthesis of ground and consequent. What remains to be proved is that causality is necessary to maintain the unity of time.

⁵ A 126-8. Compare Chapter XXVII § 4.

⁶ B 163-5.

⁷ His explanation of the difference between *natura materialiter spectata* (B 163) and *natura formaliter spectata* (B 165) should be noted

Appearances exist only in relation to the human mind so far as it possesses sensibility, and the laws governing appearances exist only in relation to the human mind so far as it possesses understanding. The laws of nature are imposed by the mind upon the phenomenal world, but it is only the universal laws or principles which are so imposed. Particular laws cannot be deduced from these universal principles, but must be learned through experience.¹

In all this the dependence of objects on the human mind is bound up with our knowledge of their necessity. This is equally manifest in his final summary,² where he reaffirms his Copernican principles,³ and rejects the theory of pre-established harmony with that contempt which it deserves.⁴

and compared with *Prol.* §§ 14-17 (IV 294 ff.) and with *M.A.d.N. Vor.* (IV 467). Note also the clear statement that the empirical synthesis depends upon the transcendental synthesis, and therefore upon the categories. See B 164.

¹ They must, however, 'stand under' (or be particular determinations of) these principles. We learn by experience what is the cause of a particular event, but we know *a priori* that every event must have a cause.

² § 27, B 165-8.

³ Compare B XVII, A 92 = B 124-5, A 128-9.

⁴ Compare Chapter VIII § 8.

CHAPTER XXX

THE ARGUMENT OF THE DEDUCTION

§ 1. *The Analysis of Experience*

The crossing of the Great Arabian Desert can scarcely be a more exhausting task than is the attempt to master the windings and twistings of the Transcendental Deduction. Nevertheless, as we look back upon the way which we have traversed under Kant's guidance, we may perhaps conclude that some of the difficulty is of the sort to be found in reading the description of a game which we have never played. When we have mastered the game, we may still have trouble in making, or even in following, an exact description of it; but once the game is understood, the description becomes relatively easy, and the game itself is seen to be simple.

Kant's elaborate argument is a philosophical analysis of human experience on its cognitive side. Once we have a clear view of what he is describing, the description itself will become relatively clear. If on the other hand we fail to see what he is describing, and if we imagine that he is describing something quite different—for example, if we suppose he is trying to show how we come to have knowledge of objects, or how experience develops in time—then everything that he says will seem to be almost perversely nonsensical and to be written, as he himself suggests, in a kind of double Dutch.¹

Kant is trying to make us see what is, and must be, involved in all human experience, that is, in all our knowledge of objects; and the objects about which he is thinking are primarily, though not exclusively, physical objects.

If we are to know objects, we must have something given to us in sensation, and that something must be given to us under the forms of space and time. What is given us at any moment is in itself transitory, and is very much less rich in content than we commonly suppose. We are always interpreting

¹ See *Prolog. Vorw.* (IV 262).

it and supplementing it in thought and imagination. It is given here and now, but it must be combined or connected with what has been given previously, and it must be assigned a definite position relatively to other appearances in one time and space. In order to do this we must fill out or construct the unchanging space and the continually changing time in which such positions must be assigned. Only so can we have before us a particular part of the one world which exists for us in a single space and time.

In all this there is more at work than the synthesis of imagination. There is also judgement. All sorts of irrelevant images may be passing through our minds at the same time, but we distinguish these images from the one objective world which we construct in imagination on the basis of our given and changing *sensa*. It is not enough that ideas or images should be together in our minds, or that they should be suggested to us by what is given. In judgement we assert an objective connexion and separate, so far as we can, subjective appearance from objective reality. The greenness of the grass may suggest to me the hills of Paradise, but what I know is Quainton Hill, and I judge that Quainton Hill is green.

So to judge is to distinguish, however vaguely, between subject and object, between my thinking and what I think; and apart from thinking there could be for me no distinction between an objective world in time and space and the subjective succession of my own ideas. Thinking implies some degree of self-consciousness, since it affirms an objective, as opposed to a subjective, world. And all my thinking must be in some sense one thinking, as I set the different parts of one objective world over against myself.

Empirical and pure intuition, an empirical and a transcendental synthesis of imagination, thought of the object and thought of the self, these, difficult though they be in a philosophical analysis, must be present when we experience any object. They are all involved in my simple judgement that this hill is green. They are not stages on the way to experience, but elements in experience; and Kant's contention is that when

we understand these elements, we can make *a priori* assertions as to what every object of experience must necessarily be.

§ 2. *The Demand of Thought*

We shall, I think, understand Kant's argument best, if we start with his view in regard to the nature of thought. In considering this we shall do well to keep before our minds thought which is concerned with physical objects. Indeed it is on this alone that I propose to concentrate here.

Human thought is not by itself a direct acquaintance with reality. It always takes place by means of concepts, and we apply these concepts to a reality which is given to sense or which is assumed to be capable of being given to sense. In other words we think 'about' reality by means of concepts; or in Kant's language thought is not intuitive, but discursive. To think is to judge; and in judgement we combine concepts, and apply them to reality or affirm them of reality.

On this view truth is to be found in correspondence between our judgements and the particular reality which we judge. For example, in the concept 'house' we think of a combination of 'marks' supposed to be found in a number of sensible objects; and in the concept 'red' we think of a 'mark' supposed to be found, along with others, in a number of sensible objects. When we judge that this house is red, we not only combine our concepts in the judgement; we also affirm that the combination of marks thought in these concepts is to be found in this individual sensible object. If our senses give us a complex intuition in which the marks of a house are combined with the intuition of red, then our judgement is true.¹

It may be said that this correspondence between our judge-

¹ A similar principle holds if even an analytic judgement—such as 'All bodies are extended'—is to be true of reality. I ignore all difficulties as to the way in which the marks thought in the concept differ from intuitions; and I ignore also, for the sake of simplicity, Kant's distinction between 'marks' and 'partial ideas'; see Chapter IX § 4.

ments and reality—or between the combination of marks thought in our judgements and the combination of intuitions found in sensible reality—is easy to understand. Reality is given to our senses, and we make our concepts and judgements by acts of analysis and abstraction. If we perform these acts of analysis and abstraction correctly, we have correspondence and truth. In the particular example given, we have a complex intuition of a house, and of this intuition an intuition of red is a part. The judgement ‘This house is red’ merely affirms in conceptual terms a combination given in intuition, recognising at the same time that there might be similar combinations in other intuitions of houses, and similar reds in other intuitions of red objects.

With such a statement Kant, as I understand him, would agree, but he would add certain qualifications.

He would deny that sense by itself can give us that reality which we call a house, and still more that it can give us an ordered and objective world of which this house is a part. We must in imagination combine the present given appearances with past appearances, and perhaps with appearances not given to sense at all.¹ Above all we must regard the appearances given at different times and through different senses as appearances of one and the same object, namely a house; and we must regard the sum of these appearances, not as a mere phantasm of our imagination, but as constituting a real object in an ordered world. This is impossible apart from thought.

The reality which we analyse in making our judgement that this house is red is therefore a reality which is given, not to mere sense, but to sense and thought; and apart from thought it would not be an object for us. Moreover—and this is the point at which Kant’s transcendental doctrine begins to play its part—thought has demands of its own which must

¹ We take it for granted that, for example, the interior of the house is not solid but is divided up into rooms. We also take it for granted that the walls which we have seen and not touched are hard and solid.

be satisfied, if we are to have any object before us for purposes of analysis, and if our thinking is to have a corresponding object and so to be true.

The fundamental demand of thought is that reality should be thinkable. In conception and judgement we think a combination of marks, and for this it is necessary that one and the same mind—or (if we wish to avoid metaphysical implications) one and the same thinking—should be able to hold before itself these marks in combination. Thought, we may say, manifests itself necessarily in the synthesis of concepts; and if truth is to be possible at all, there must be a corresponding synthesis or combination in the manifold which is assumed to be given to sense.

This does not mean that there must be in reality a combination of the manifold corresponding to the combination of marks thought in any particular concept such as 'house' or 'chair' or 'chimaera'. It does mean that there must be in reality a combination of the manifold corresponding to the combination of marks which is involved in all conception as such or all judgement as such. Without such combination in the manifold there can be no truth at all, no knowledge of objects, and no objects for us.

We may put this more technically by saying that the synthetic unity of thought—or the synthetic unity of apperception, if thought is supposed to be conscious, however dimly, of its own essential nature—demands a corresponding synthetic unity in the given manifold. This implies that every individual object must possess synthetic unity, if it is to be an object for us; and the whole of reality must possess synthetic unity so far as it can be an object for us.

To say this is in some ways to say very little, though even this little is denied, I think mistakenly, by some philosophers. I ignore for the present the fact that the manifold could never possess synthetic unity for us apart from the synthesis of imagination as manifested in apprehension and reproduction. All I am suggesting is that thought demands the synthetic unity of the manifold, and if this demand cannot be

satisfied there can be for us no truth, and no knowledge of objects.¹

To sum up—Kant maintains that the manifold must have synthetic unity in the interests of thought. He denies that we could know this unity to be necessary merely by contemplation of given reality.

§ 3. *The Forms of Thought*

The contention that synthetic unity of the manifold is necessary for experience remains extremely vague, unless we can describe in detail the nature of this synthetic unity. It may be important to point out that apart from principles of synthesis there can be no experience of objects; but unless we can specify these principles, we are asserting the very minimum of truth.

The Transcendental Deduction is not concerned with the separate categories: its only aim is to demonstrate the objective validity of categories in general. Nevertheless it must be understood in its context, and its value must be estimated in the light both of the Metaphysical Deduction which precedes it and of the Principles which follow. Until we have examined the separate Principles of the Understanding, we are not in a position to assess the value of the Critical doctrine; but it would be folly not to recognise that the argument appears to break down on one vital point, the very point which Kant himself regarded as the most certain and the most secure.

Kant believes that the system of the *Kritik* carries with it apodeictic certainty to those who accept two principles: (1) that all our intuitions are sensuous, and (2) that the complete table of categories is derived from the forms of judgement.² To say this is to say that the argument rests on the Metaphysical Deduction.

¹ I take it that what Kant calls the intellectual synthesis includes, not only the synthesis of marks, but also the synthesis of the manifold in general; for the aim of thought is not merely to combine marks, but to affirm that this combination has an instance or instances in reality itself.

² *M.A.d.N. Vor.* (IV 474 n.).

In this respect, as in others, Kant's own view of his argument seems to me to be sound. The Metaphysical Deduction rests upon the list of the forms of judgement. The Transcendental Deduction—both on its primary or objective side, and therefore also in some degree on its secondary or subjective side—rests upon the Metaphysical Deduction. It follows that if we cannot accept the list of the forms of judgement as offering us *a priori* certainty, the whole fabric of the Transcendental Deduction, and therefore of the *Kritik*, is threatened in its very foundations.

That this is so must be frankly admitted, as it would be admitted by Kant himself. The weakness of the Deduction as a whole is not its inconsistency, but the fact that it is built consistently on a logic which has now been superseded.

We can afford to smile nowadays at Kant's devotion to Formal Logic; and his defects in this matter have been so often condemned, and indeed exaggerated, that I need not dwell further on this topic. Nevertheless the more I study the *Kritik*, the less confident do I feel that his view as to the nature of judgement is merely artificial; and the question arises whether his doctrine cannot be freed from its connexion with the table of forms, and stated in a less artificial way.

The essence of Kant's claim is that there can be no experience of objects unless judgement is present as well as intuition, and that judgement as such makes certain demands upon intuition. Judgement demands not only that our intuitions must have synthetic unity, but that this synthetic unity must have certain definite characteristics, or in other words, that the given manifold, whatever be its nature, must be combined in certain definite ways. I will try to put these demands in a more plausible way without reference to the logical table of the forms of judgement.¹

In the first place judgement demands a plurality of homogeneous units which can be thought as a totality. This demand seems to be involved in conception as such; for a concept

¹ Compare Chapters X § 5 and XIV § 8.

must have different instances which can be taken together to form a class.¹

In the second place judgement demands that it should be able to affirm and to deny, and thereby to delimit. Both affirmation and denial are essential to judgement; and we cannot clearly understand an affirmative judgement till we know what it is intended to deny, nor can we clearly understand a negative judgement till we know what it is intended to affirm.

In the third place judgement demands something to think about; that is to say it demands a subject which is distinct from predicates. It also demands a reason or ground; for it does not profess to make merely arbitrary statements. Finally it demands that objects shall be of such a character as will enable us to apply to them concepts which mutually exclude and mutually determine one another in a system;² and this means, on Kant's view, that the objects themselves must mutually exclude and mutually determine one another in a system.

In the fourth place the fact that judgements must be possible, actual, and necessary demands, according to Kant, that objects of judgement must also have a corresponding possibility, actuality, and necessity.

If we put Kant's doctrine in this way, it begins to have an air of greater plausibility, and it offers us a more satisfactory account of what may reasonably be called the necessary form (or forms) of thought. We may feel doubt as to the truth, and even the meaning, of some of these assertions;³ but it seems reasonable enough to assume that judgement as such does make definite demands upon the given manifold, and that these demands must be satisfied if there is to be knowledge or experience of objects. In essence these demands amount to

¹ I pass over difficulties about the concepts which can have only one instance.

² This is true of concepts not merely in the disjunctive judgement, but in all affirmation and negation. To say 'This house is red' implies that it is not another *colour*.

³ It is not clear at the present stage how these demands of thought are to be interpreted when they are directed to a given manifold of sense.

this—that the manifold must be combined (or be capable of being combined) in accordance with certain principles of synthesis involved in judgement as such. To recognise this general possibility is sufficient for the purposes of the Transcendental Deduction.

§ 4. *The Subjective and Objective Sides of the Deduction*

The pure categories are the principles¹ of synthesis which are present in judgement as such, and in accordance with which the given manifold must be combined if there is to be knowledge of objects. If we consider the categories in abstraction from their relation to the given manifold of sense, they are mere forms of judgement: it is only as *somehow* determining the nature of a given manifold that they can be regarded as categories. They are none the less *pure* categories; for they spring only from the nature of judgement, and they are in no way derived from the nature of the given manifold which is said to be combined in conformity with them.

The argument so far maintains only that certain definite principles of synthesis are necessarily involved in judgement as such, and that the combination of the given manifold must conform to these principles, if there is to be any object of experience; for there can be no experience apart from judge-

¹ Kant regards the pure categories also as pure *acts* of synthesis present in judgement as such and determining the combination of the manifold for us. Such pure acts take place in accordance with principles of synthesis; and when we conceive the common nature of these acts, we conceive the principles of synthesis in accordance with which the acts take place. By describing the categories as pure acts Kant makes it clear that the categories are at work in all experience whether we conceive them clearly or not. But principles of synthesis can be at work in experience even when we do not conceive them, and it seems to me unsatisfactory to describe the categories as pure acts; for they are really the principles of synthesis manifested in judgement so far as judgement is a pure act, that is, an act which has principles not derived from the nature of the manifold judged.

There is a further ambiguity inasmuch as the categories are sometimes spoken of as principles of synthesis and sometimes as the concepts of these principles. This usage appears to me to be a natural one, and I do not think it necessary to use two words to mark the distinction.

ment. This argument may be called the objective side of the Transcendental Deduction; and if we are to estimate it justly, we must be absolutely clear about its limitations.

Thus we must not suppose that Kant imagines himself to have made clear the characteristics¹ which objects must have if they conform to the pure categories; nor indeed has he explained how objects can, and must, conform to them. He has shown merely that *unless* the manifold is combined in accordance with the pure categories, there can be for us no objects of experience. He always insists that apart from the forms of space and time the categories are empty: we can neither show what they mean as applied to objects, nor can we show that there must be objects to which they apply. In order to do this in detail we must follow the whole argument in the *Analytic of Principles*; but we can explain generally how objects can, and must, conform to the principles of synthesis contained in the pure categories, if we examine the transcendental synthesis of imagination. This task belongs to the subjective side of the Transcendental Deduction, and it seems to me to be necessary for the understanding of Kant's argument.²

To put the matter in another way—it might be a mere accident whether appearances conformed to the categories or not. No doubt if they did not conform, we should cease to have experience; but in that case so much the worse for us. So far as the argument has gone at present, the conformity of appearances to the categories must indeed have occurred; for there has been such a thing as human experience. That conformity might, however, have been due to a pre-established harmony arranged by the beneficence of God; and any view of this type is emphatically rejected by Kant.

We can understand *how* the manifold must conform to the

¹ At present, for example, we are not entitled to speak of permanent substances with accidents nor of causes and effects.

² This appears to be Kant's own view in the second edition, though not in the first.

categories only when we remember that the appearances given to our senses are not things as they are in themselves, but things as they must appear to our senses. In particular they must be given to us under the forms of time and space; and time and space are due solely to the nature of our sensibility. Kant does not seem to me to be sufficiently explicit on this point, but I take him to maintain that the manifold of time and space, because it is pure and homogeneous and dependent on our sensibility, cannot be recalcitrant to the principles of synthesis demanded by the nature of our thought.¹ Time and space must conform to that demand for synthetic unity which is the most ultimate and general demand of thought; and unless they did so, the unity of thought (or the unity of apperception) would be impossible. There must be only one time and one space, and to this ultimate necessity the combination of the given manifold must conform.

This is all the more certain on Kant's view, because he believes that there is no combination (or at least no objective combination) in the manifold apart from the synthesis of imagination,² and that the synthesis of the empirical manifold must necessarily be also a synthesis of the pure manifold of time and space. *The empirical manifold must therefore possess such synthetic unity as is necessary for it to have a definite position in one time and space.*

This very general conclusion is the result of the Transcendental Deduction on its subjective side. We can now understand not only *that* the empirical manifold must possess the synthetic unity demanded by thought, if we are to have experience of objects: we can also understand *how* it must do so

¹ At the very least he holds that because the manifold of time and space is pure, we are able to understand *a priori* how the principles governing the transcendental synthesis of imagination necessarily conform to the principles of synthesis present in judgement as such. Compare also Chapter XXXIV § 3.

² I would insist again this does *not* mean that the mind is by itself the source of empirical differences, such as that between a chair and a table. It is the source only of what is common to chairs and tables and all other objects.

under the actual conditions of human experience, namely, the forms of space and time and the transcendental synthesis of imagination.

If this were the whole of Kant's doctrine, it would still seem to be of relatively minor importance. The value of the argument depends upon the total background of his thought. As we shall see in the sequel, Kant argues, whether successfully or not, that the transcendental synthesis of imagination which maintains the unity of time and space necessarily imposes on the empirical manifold certain principles of combination which accord with the principles of synthesis present in judgement as such. Only when we have followed the whole argument can we understand *in detail* how the given manifold must conform to the pure categories. When we understand this, we shall also understand how the pure categories acquire a definite content by being schematised with reference to time and space. We shall understand, for example, how the given manifold must be governed by cause and effect, and so must conform to the demand of thought for grounds and consequents; for a cause is merely a ground which precedes its consequent in time.

In the Transcendental Deduction Kant is dealing only with the general principles of his long and elaborate proof. To take the Transcendental Deduction as complete in itself, and still worse to take it as a series of separate arguments each of which is complete in itself, is to miss that synoptic view of the whole Critical position without which Kant's argument must inevitably seem perverse and unintelligible.

§ 5. *The Nature of Kant's Argument*

There is a real danger that amid the intricacies of Kant's exposition we may be unable to see the general character of his argument. As he never ceases to insist, he is attempting throughout to determine the necessary conditions of experience as such, and to argue from these conditions to the necessary characteristics of objects.

We must not suppose from this that his arguments are merely circular. He does not, for example, argue that because cause and effect are everywhere assumed in experience, therefore causality is a condition of experience, and therefore all objects must conform to causal law. Such a simplification of his doctrine would be the merest travesty.

Kant finds his starting-point, as we all must, in the human experience which we actually possess. He maintains—and surely with justice—that experience involves the co-operation of sensuous intuition and discursive thought. In the Aesthetic he has argued that space and time are the forms of our intuition and are due to the nature of our sensibility. In the Analytic he argues that thought also has its own forms; that these forms are principles of synthesis whose nature and number can be specified; and that a manifold combined in one time and space must be combined in accordance with these principles of synthesis. The forms of thought may be regarded as pure categories in so far as they are believed to imply that the given manifold must be combined in accordance with them, if we are to have knowledge of objects.

The question then arises in what sense we can regard our knowledge of the pure categories as *a priori* knowledge.

There is no doubt that Kant is repudiating claims which had been made for *a priori* knowledge in the past. He does not believe that the categories play any part in a divine experience; and he admits that time and space need play no part in other finite experiences. But to hold this is not to abolish all distinction between the empirical and the *a priori*. It is rather to make the distinction itself more reasonable and the claims of human thought less arrogant.

There is at least a relative difference between the empirical and the *a priori* within human experience itself; and it appears to me that if any knowledge is in any sense *a priori*, then we have *a priori* knowledge (1) that there can be no human experience without the co-operation of sense and thought; (2) that human thought must make use of concepts, must affirm and deny and thereby delimit, must have a subject for

its predicates, and so on;¹ and (3) that if the manifold of sense did not conform to these conditions, there could be no thought and no experience for us.

In this argument Kant first of all isolates the factor of thought which he believes to be necessary for experience; he then finds in thought certain necessary principles of synthesis; and finally he concludes that if experience is to be possible, the given manifold must be combined in such a way as to conform to these principles of synthesis.

This procedure seems to me perfectly rational, and I have no sympathy with the criticisms which suggest that Kant made a mistake in attempting to consider thought in abstraction from the other elements in experience.² It is precisely this separation which gives plausibility to his argument. We must grasp the internal necessity of synthesis for thought by itself, and only so can we understand that the pure categories must be necessary conditions of experience. Similarly it was only because we found an internal necessity in time and space by themselves that we were justified in regarding them as forms or conditions of sensuous intuition.³

Unfortunately Kant has too much confidence in Formal Logic to explain the Idea or the systematic principle which underlies his account of the forms of judgement and the categories. It does not appear to me to be enough to say merely that they are found by an analysis of the nature of judgement as such. I need hardly add that if we attempt to free Kant's argument, as I have done, from its associations with Formal

¹ Compare § 3 above. We need not here insist on the correctness of these details. It is sufficient if we can accept the general possibility and go on to see how Kant works out the details later.

² This view is particularly prominent in Caird, and is bound up with the belief that Kant considered thought in abstraction to be purely analytic—an error so profound that it makes the understanding of the Deduction impossible. Caird's exposition is valuable when it yields to the influence of the actual words in the *Kritik*, and so breaks away temporarily from this curious doctrine; but unfortunately he keeps pulling himself back to his central error at the very moments when his just and sympathetic mind is on the point of seeing the truth.

³ See Chapter VII § 4.

Logic, we ought to show not only that each of these forms of thought or principles of synthesis is involved in judgement as such: we ought also to show that they are derived from one principle, and that they constitute a system such that nothing can be added and nothing taken away.

§ 6. *The Copernican Revolution*

I have assumed so far that we can have *a priori* knowledge of certain principles of synthesis involved in judgement as such. Such an assumption seems to me to be justified whatever be our exact theory about the details. Nevertheless the question inevitably arises why we can be assumed to have *a priori* knowledge of the nature of human thought, but not to have *a priori* knowledge about the nature of the physical world. Kant always seems to take it for granted that *a priori* knowledge of the former kind requires no explanation, while *a priori* knowledge of the latter kind can be justified only if it is shown to follow from *a priori* knowledge of the nature of the mind. This is in fact the essence of his Copernican revolution.

Thus it might seem that we have *a priori* knowledge in regard to bodies; for example, we know that a body must have shape and extension and perhaps impenetrability.¹ If so, we may reasonably ask ourselves why such knowledge is on a different footing from our *a priori* knowledge of thought. Kant would, I think, hold that we have such *a priori* knowledge of bodies, but would regard this knowledge as analytic;² and he maintains that synthetic *a priori* knowledge of bodies—such as we have in the Principles³—is possible only if space

¹ We cannot dismiss such knowledge as resulting merely from the convention that we do not call anything a body except when it has these characteristics; for we recognise that there is a necessary connexion between shape and extension, and it is hard to see how any thing could be impenetrable unless it had both extension and shape.

² Compare A 106. B 11–12 suggests that such knowledge is analytic judgement.

³ This synthetic *a priori* knowledge is the condition of our knowing bodies empirically, and so is the condition of these empirical concepts (such as 'body') by the analysis of which we can proceed to make analytic judgements.

and time are the forms of sensibility and if the categories originate in our understanding.¹ We can have synthetic *a priori* knowledge (and for the present purpose this is the only kind of *a priori* knowledge we need consider)—we can have synthetic *a priori* knowledge only of those characteristics of bodies which are contributed by the mind itself.

This doctrine Kant appears to regard as obvious. It has perhaps a certain obviousness as against the English empiricists. If we consider the mind as merely passive, as a *tabula rasa* upon which impressions are made successively from without, it certainly looks as if all *a priori* knowledge were impossible. We could perhaps say that all things hitherto experienced had possessed certain common characteristics,² but we could never say that they must do so. This doctrine is present already in Leibniz,³ and to some extent in Plato.

If this were all that could be said, Kant's theory would be open to the objection that there are other possibilities to be considered. Moreover Kant does not, as does Leibniz, maintain that knowledge of necessary truths depends only on the *activity* of the mind. He does indeed hold that the activity of the mind in thinking is the ultimate source of certain principles of synthesis in accordance with which the given manifold must be combined; and consequently that our knowledge of the mind's activity enables us to have *a priori* knowledge of objects. This general view he may, I think, be said to share with Leibniz; but he also holds a view peculiar to himself—that we can have *a priori* knowledge of space and time as forms of sensibility, that is, as contributed by the mind on its *passive* side.⁴

¹ It is only on this supposition that we can know the necessary connexion of shape, extension, and any other characteristics in bodies.

² Even this we could not do without holding the past and present together before us in one act. Furthermore we could not possibly have knowledge of 'things'.

³ I am not concerned with the origin of Kant's doctrine, but it is astonishing how much of the Transcendental Deduction can be found in germ in the earlier chapters of the *Nouveaux Essais*.

⁴ It must, however, be remembered that space and time can be pure intuitions only through active synthesis; there is no *a priori* knowledge apart from the activity of the mind.

Kant's doctrine as a whole therefore seems to rest, not upon the assumption that the mind can have *a priori* knowledge only of its own activity,¹ but upon the assumption that it can have *a priori* knowledge only of its own nature and of what it contributes out of its own nature to any known reality which is other than itself.

Kant's claim that the mind has *a priori* knowledge of its own nature is strictly limited. He never claims that when we consider our own sensibility, we can see *a priori* that it must have the two forms of time and space, no more and no less; but he does claim that when we consider our understanding we can see *a priori* that it must have certain forms or functions, no more and no less.² Thus in the *Analytic* he begins with *a priori* knowledge of the forms of our own thought and argues from this to the categorial characteristics of objects. In the *Aesthetic* he begins with our *a priori* knowledge of space and time, and argues that such knowledge can be *a priori* only if space and time are forms of sensibility.

Hence although Kant believes that what reason produces from itself cannot be concealed,³ this does not appear to be the only, or even the primary ground, for the Copernican revolution; and we ought never to forget that he arrived at his Copernican revolution by a consideration of time and space, not by a consideration of the categories.⁴ Kant's central argument seems rather to run along the following lines. We come to know *a priori* ideas, like all other ideas, only through experience, yet

¹ Compare Croce's view that the mind can *know* only what it *does*.

² It is true that in B 145-6 Kant places the categories on precisely the same level as time and space, and ascribes the categories to a 'peculiarity' (*Eigentümlichkeit*) of our understanding. This does not seem to me to express his ordinary view. He usually assumes that all finite thinking must be by means of our human categories, although not all finite sensibility need involve the forms of time and space.

³ A XX; compare also B XXIII and B 23.

⁴ This always seems to me surprising; for the doctrines of Leibniz lead up to Kant's view of the categories, not to his view of space and time. Furthermore the argument, granted Kant's assumptions, seems more plausible in regard to the categories than it does in regard to space and time.

when we are once consciously aware of such ideas, we can find in them an element of necessity, and thereby we can increase our *a priori* knowledge. The fact that we can increase our *a priori* knowledge in complete independence of experience,¹ and that this *a priori* knowledge nevertheless must apply to objects of experience is, he believes, a clear proof that what we are dealing with must be due, not to the nature of independent things, but to the nature of our own minds.

It is the double character of *a priori* knowledge, (1) as capable of being extended independently of experience, and (2) as necessarily applying to objects of experience—it is this double character which Kant believes to be intelligible only if we accept the Copernican revolution;² and the necessity of such a revolution is confirmed for Kant by the fact that if we take an empirical concept, which is derived from experience by mere abstraction, we can never by any kind of thinking either extend our knowledge of the concept or acquire any further knowledge of the objects to which it applies.³

Our *a priori* knowledge of the forms of thought, or of the principles of synthesis necessarily present in thinking, is in this respect parallel to our knowledge of space and time. Our knowledge of the forms of thought enables us to extend our knowledge independently of experience; for it enables us to say, not only what the common character of all judgements must be, but also what are the ultimate principles of synthesis to which any possible object of experience must conform. Such *a priori* knowledge is, it is true, vague and shadowy when it is directed to objects of experience; but it will become precise and definite when we work out the implications of applying

¹ We do this both in pure mathematics and in Kant's own Critical Philosophy, though in the latter case only by reference to the form (or the possibility) of experience.

² Compare Chapters VII § 4 and VIII § 4. Leibniz, I believe, also accepted these principles, though he failed to draw the conclusion that we can know things only as appearances and not as things-in-themselves.

³ We can analyse the concept and make it more distinct, but this does not extend our knowledge.

these principles of synthesis to the pure manifold of space and time.

§ 7. *Difficulties in Kant's view*

Kant's procedure seems to me consistent, but it does not really meet the difficulty I have raised, namely, why our admittedly *a priori* knowledge of the forms of appearances should require explanation, while our admittedly *a priori* knowledge of the forms of thought should require no explanation.

Consider first space and time as forms of appearances or intuitions, using 'appearance' and 'intuition' in a neutral sense which does not commit us to the Copernican revolution.

Granted that we perceive spatial and temporal relations in the given, why should we not be able to abstract from the given the system of spatial and temporal relations; and why should we not be able both to recognise the necessity which governs that system of relations throughout and to understand that this necessary system of relations is a condition of all given appearances? Or rather—since Kant maintains that we can do these things—why should we maintain that our *a priori* knowledge of this system is intelligible only if the system itself is imposed upon the given manifold by the nature of our sensibility? ¹

In the case of thought we become aware by reflexion of certain principles of synthesis which are present in judgement; we abstract these principles of synthesis; and we claim to recognise their necessity as forms or conditions of judgement and as principles of synthesis to which all objects of experience must conform. Why should we accept our knowledge of the forms of judgement as self-explanatory, whereas in the case of space and time we require to go behind our knowledge and to offer an explanation for it? ²

¹ Compare Chapter VIII §§ 4-6.

² The most formidable criticisms of this view of Kant's in regard to space and time are to be found in Prichard, *Kant's Theory of Knowledge*.

Kant seems to believe that if finite minds are to obtain knowledge of a reality independent of themselves, they must be affected passively from without. The mere fact that reality is assumed to be independent of the human mind means that if it is to be known as it is in itself, it must reveal itself to a mind which in such knowledge is completely passive and may be described as a *tabula rasa*; and this in turn means for him that the knowledge in question must be empirical.¹

There is some initial plausibility in this view, but it does not meet the objection that the mind might still be active in abstracting or isolating the system of relations and in understanding the necessity of the system. Such an activity need not impose or alter the character of the system which is isolated and understood.

When we turn to consider our *a priori* knowledge of thought, there is, I think, an element of truth in the view that in some ways thinking is specially intelligible to itself. No doubt in thinking about our thought, the thought which we think about is other than the thought which thinks about it. Nevertheless our present thinking is itself an example of what we are thinking about. Even when we think of our past thinking, we can have an internal as well as an external view of it; we can re-think it as well as think about it. In the case of physical objects our view is wholly external: we can think about them, but we cannot 'enjoy' or re-create their experience—indeed we commonly believe that they have no experience to be enjoyed or re-created.²

There are certainly important differences in the two cases we have considered—notably the fact that what I have called the system of spatial (or temporal) relations looks uncommonly like an individual thing, while the system of forms of thought does not look in the least like an individual thing. This is one

¹ I think he really believes also that it implies a theory of representative idealism such that while we might have faith that our ideas were exact copies of things-in-themselves, we could not have knowledge.

² I have discussed this point in *The Idea of the Self*, University of California Publications, Vol. 8, 1926, pp. 73 ff.

of the reasons why Kant attributes our knowledge of space and time, not to thought, but to intuition. Yet in spite of their differences, I cannot feel certain that we have found any conclusive reason for maintaining that our *a priori* knowledge of space and time demands an explanation which is not required for our *a priori* knowledge of the forms of thought.¹

§ 8. *The Copernican Revolution and the Categories*

On the other hand, the Copernican revolution has in some ways a greater plausibility as regards the categories than as regards space and time. The activity of thought is partly determined by the nature of the given, but it seems to have a nature of its own such that it must take certain forms, whatever be the nature of the given. There is nothing unreasonable in the suggestion—whose full significance we have still to investigate—that the given manifold must conform to the principles of synthesis required by thought; for without this there can manifestly be no knowledge of objects.

Let us assume the Copernican principle—which Kant already claimed to have established from the examination of space and time—that what is known to be universal and necessary must be due to the nature of the knowing mind. If the categories are universal and necessary—and without this they are not categories—we must look for their origin in the mind. On this hypothesis it is natural to find their origin, not in sense, but in understanding: we sense things in time and space, but it is only by thought, if at all, that we can know them to be governed by causal law. If we look for the origin of the categories in the active power of understanding, we must find it in the nature of judgement; for what the understanding does is to judge. Furthermore we must find it in the universal nature of judgement, in that which is present in judgement

¹ I think Kant's fundamental reason for his view in regard to space and time is that in this way alone can we do justice to the individuality of space and time—unless we are prepared with Newton to regard them as things-in-themselves, and therefore as a kind of receptacle in which objects are.

whatever be the character of the matter judged. This universal nature may properly be called the form or function of judgement, and it is to be found in certain principles of synthesis which are necessarily present in judgement as such. Kant's only mistake—and I do not wish to minimise its seriousness—is to be found in the fact that he takes the table of the forms of judgement, as set forth in his version of Formal Logic, to give us a complete list of these principles of synthesis; and even here it may be maintained that these forms of judgement give in an inadequate way some indication of the genuine necessities of thought.

In all this Kant's procedure is essentially reasonable. The fact that we can no longer accept the traditional view of the forms of judgement offers no justification for asserting that the derivation of the categories from the forms of judgement is merely arbitrary, or that it springs from a perverse desire to establish connexions, however artificial, between Transcendental and Formal Logic.

We have still to consider whether there is any plausibility in connecting the forms of thought with the schematised categories; but I think we shall find that the connexion is not quite so artificial as is commonly supposed. Some philosophers may be able to assert *a priori* by an examination of the nature of change, that every change is change in a permanent substance, and that every event must have a cause. If they are right, there is manifestly no need for Kant's Copernican revolution; but I must confess that hitherto such insight has not been vouchsafed to me. In the case of the categories of substance and cause, if they are not to be set aside altogether as useless lumber, it is, I submit, a hypothesis worthy of serious consideration that they are due partly to the demand of thought for a subject of predicates and a ground of assertion.

In any case Kant recognised clearly that the forms of judgement were principles of synthesis; and it is small wonder that when he was able, with the aid of a little ingenuity, to connect the recognised categories with the forms of judgement, he should be satisfied that his list was complete. The congruence

of the categories with the forms of judgement was not only a proof of the *a priori* origin of the categories in the mind: it was also a striking corroboration of the Copernican doctrine that the origin of the universal and necessary must be found in the nature of the mind itself.

That corroboration is for ever gone, unless we can substitute something better, and yet similar, for Kant's forms of judgement. In any case the completeness and beauty of his argument are permanently impaired; but we need not for that reason fail to recognise the subtlety and ingenuity of his thought.

CHAPTER XXXI

THE FACTORS IN EXPERIENCE

§ 1. *The Unity of Apperception*

Whatever view we take about Kant's argument as a whole, there is, I would suggest, a permanent value in his account of the different factors at work in experience. This is true even when we have grounds to complain of the inadequacy and obscurity of his exposition; and I believe that it is true as regards his account of the unity of apperception.

We know, if we know anything, that self-identity is the condition of all knowledge, and that this self-identity is manifested in the act of synthesis which must be present in all thinking and in all judgement. To suppose that self-identity consists either in a common constituent of recognised mental states, or in the interrelation between them, is to destroy the very possibility of knowledge. What is required for knowledge is the unity of the subject thinking, and not merely the unity of a particular kind of object thought.¹

This doctrine Kant seems to me to have established. Its further analysis, as he himself recognises, is a matter of great difficulty.² We are not entitled to assume that the knowing self is a permanent substance—a view he explicitly rejects. The very phrase 'the unity of apperception' seems to warn us that what he is describing is the unity, not of a substance, but of an activity, or even of an act.

On the other hand, we are entitled to assume that the activity of thinking involves some sort of self-consciousness. Thinking always implies a distinction between appearance and reality and

¹ I have argued this at greater length in *Mind*, Vol. XXXVIII, N.S. No. 151. See also Chapter XXI, especially §§ 4-5, and Chapter XXVIII § 5.

² We shall have to consider later the extremely difficult question of the relation between the unity of apperception and inner sense. See Chapter LII.

between truth and error; and these distinctions are meaningless unless we presuppose a distinction between the knowing self and the known world. Self-consciousness is therefore implicit in every judgement; for every judgement claims to know reality and to assert truth. This is borne out by the fact that we can always turn back and reflect about our thinking, for to reflect about thinking is to be self-conscious.

Kant is also right in maintaining that to judge is to assert objectivity, and to affirm at least the partial independence of the known world. His double principle is fundamentally sound: there is no known world apart from a thinking and synthetising self; and there is no thinking self and no self-consciousness apart from a known and synthetised world.

§ 2. *The Unity of the Object*

The necessary unity of apperception finds its counterpart in the necessary unity of the object, and ultimately in the necessary unity of the whole objective world.

It may seem that Kant's assertion of the necessary unity of the object is a mere begging of the question, and that his whole argument evades the difficulties which had been set forth by Hume. I do not think that this criticism is sound. Kant does not start from the assumption that *things* are, and must be, wholes of necessarily interrelated parts. He starts, even in the first edition, from an analysis of *objects as they appear to us*, and he is surely correct in saying that our ideas of an object must be compatible with one another;¹ if they were not so compatible, we should not regard them as ideas of the same object. Besides, although Kant leads us from the unity of the object to the unity of apperception, it is the unity of apperception which is fundamental, or in Kant's language 'original': the unity of the object is derivative. This is made still clearer in the second edition.²

¹ A 104.

² In the first edition Kant directs special attention to the fact that all our knowing takes time, and, that, in order to be aware of any object (even a series of numbers) which it takes time to know, we

§ 3. *The Synthesis of Imagination*

Kant has been criticised for failing to recognise sufficiently the interdependence of thought and intuition, and for supposing that the faculty of imagination is necessary to mediate between them. I think rather that it is his critics who are too facile in their solution, or evasion, of the difficulties which he is trying to meet.

The fact that both thought and sense, as Kant fully recognises, are involved in all knowledge is no reason for confusing them: it is on the contrary a good reason why we should be careful to mark them off from one another, if we wish to avoid error.¹ And Kant's account of imagination as having an intermediate place between thought and sense is of permanent value. Without imagination we could not pass beyond the momentary *sensum*, and human understanding, as we know it, would be impossible.

Furthermore the account which Kant gives of the synthesis of imagination as both empirical and transcendental seems to me to be clearly true. As we combine our *sensa* (in accordance with our empirical concepts of objects), we also fill out in imagination the one space and time in which all objects are. The one question which still awaits an answer is—How can the transcendental synthesis of space and time be said to be in accordance with the categories?

4. *Is Synthesis Conscious or Unconscious?*

Kant's doctrine of synthesis seems to me straightforward and even simple, but it has been subjected to a great deal of destructive criticism. It has been alleged to demand a choice

require imagination, memory, and judgement. In the second edition he begins with thought considered in abstraction and insists that without thought we cannot have that unity of the manifold of intuition in general which must be present if we are to have an object: time and objects in time are considered later. In both editions the unity of thought is 'original' and the unity of the object which we think is 'derivative'.

¹ Compare A 51-2 = B 75-6.

between two alternatives. The syntheses¹ of which Kant speaks are described as necessary conditions of our experience. But if they are events which take place in our experience, they cannot, we are told, be conditions of it. On the other hand, if they do not take place in our experience, they cannot be known. Hence they are either unknowable, or else they are not conditions of experience. In either case Kant's whole theory falls to the ground.²

This criticism is not, I think, so formidable as it sounds. It seems to me to rest on a misunderstanding, and there is no doubt that Kant would reject both alternatives.

On the first view—the view, namely, that the syntheses in question are events in experience—the Deduction would be empirical. It would deal with the stages which the mind passed through on its way from imperfect to complete knowledge. It might establish the fact that we make use of the categories, but could never be a justification of such a use.³ This interpretation Kant has rejected over and over again in the clearest possible terms; and in any case the fact that it makes his whole theory absurd is surely a sufficient refutation of it. To say that we first have intuitions and then synthetise them under the categories, or that we first are aware of the categories and then apply them to an indeterminate manifold, is almost ludicrously untrue.

The second view suggests that the syntheses are unconscious or pre-logical syntheses which precede consciousness and, so to speak, prepare the phenomenal world for human consciousness. They have apparently to work on raw impressions, and turn these into ordered appearances in space and time,

¹ It makes no difference whether we call this a threefold synthesis of apprehension, reproduction, and recognition, or whether we call it a figurative synthesis and an intellectual synthesis—there is only one synthesis with different factors at work in it, but the supporters of this criticism tend to regard it as a series of syntheses.

² These objections have been put very clearly by Dr. Ewing, *Kant's Treatment of Causality*, pp. 65 ff., but he does not see that the doctrines in question arise from a false interpretation of Kant. The interpretation itself has its origin in *Vaihinger* and has been elaborated by *Kemp Smith*.

³ A 86-7 = B 119, etc.

before experience can begin. The whole elaborate machinery which Kant finds at work in experience (and which must be at work in experience) is supposed to do the same work also outside of experience.¹ The result of this could only be the pre-established harmony which Kant consistently rejects when it is ascribed, more reasonably, to an act of God; and it is clear that the whole elaborate system of syntheses which Kant describes in detail as taking place in time would be non-temporal and *ex hypothesi* unknown and unknowable. Yet this fantastic and self-contradictory fabrication is asserted by Professor Vaihinger to be the great *εὑρημα* of the Transcendental Deduction.²

What is there in Kant to encourage such an interpretation? Little enough. There is the loose employment of the word 'before' to which I have so often referred. There is the statement that imagination is blind, and that it is a function of the soul of which we are seldom conscious.³ There is the insistence that the schematism of the understanding is a hidden art in the depths of the human soul; and that its true methods we shall hardly ever divine from nature and lay open before our gaze.⁴ Such contentions, while obviously true, are far from asserting a necessarily unconscious, and still further from asserting a noumenal, synthesis. Kant's argument is on the contrary that the synthesis of imagination has to be brought to concepts by understanding, and it is only when it is so brought to concepts that we can have knowledge.⁵

¹ Apparently the transcendental syntheses take place outside experience and the empirical syntheses in experience; but I cannot see how the transcendental syntheses could be rendered unnecessary in experience because they took place outside it, nor can I see how the syntheses outside experience could be transcendental without being also empirical, if they are to determine empirical objects.

² *Die Transcendentale Deduktion*, p. 66 = 44. Compare also p. 55 = 33.

³ A 78 = B 103.

⁴ A 141 = B 180-I. Compare Chapter XIII § 4 and p. 170 n. 1.

⁵ Kant actually says in B 154 that we *always* perceive in ourselves the transcendental synthesis of imagination which determines the manifold. His general view is, however, that our awareness of it may be either 'obscure' or 'clear'.

To maintain that the transcendental synthesis of imagination (or any other syntheses or systems of synthesis) is necessarily unconscious is to contradict the very essence of Kant's argument. The unity of apperception for him necessarily implies at least potential self-consciousness, and this self-consciousness is inseparable from consciousness of the very synthesis which is alleged to be necessarily unconscious.¹

§ 5. *The False Assumptions of the Dilemma*

The two alternatives between which it is supposed we have to choose rest mainly, not upon the evidence of Kant's language, but on the assumption that Kant is trying to explain the genesis of experience. Kant's own view is that he is not concerned with the question how experience comes to be but with what is contained in experience;² and this is the only view which will make his argument intelligible.

What Kant is doing is to analyse experience into matter and form.³ The matter is given to the mind and the form is imposed by the mind: there is no reason for supposing that either is before the other.⁴ Whenever we know any object, sense, imagination, and understanding are at work together. Sense receives the matter under the form of time, imagination organises it in space and time in accordance with empirical concepts and the categories, and understanding judges it by means of the same concepts and categories. I can see no ground for saying that these processes succeed one another in time; they are all elements in the one temporal process which is experience, and it is a mere fallacy to suppose that an element in experience cannot also be a condition of experience.

The supposed dilemma with which we are confronted seems to assume (1) that we can analyse experience only into events which succeed one another in time, and (2) that a condition must precede in time that which it conditions. Both these

¹ A 103-4, A 108, A 116, A 122, B 133, B 154, etc.

² *Prolegomena*, § 21a (IV 304).

³ Compare A 96, A 129-30, B 169, etc.

⁴ They are distinguishable, but not separable.

assumptions are groundless. The transcendental synthesis of imagination is, not a separate event, but a necessary element in every act of knowing or experiencing an object; and it is a necessary condition of such knowledge or experience, although it is neither an earlier event in time nor a pre-conscious and non-temporal noumenal act.¹

§ 6. *Example of the Transcendental Synthesis*

If we consider the simplest and most intelligible form of the transcendental synthesis, the synthesis of quantity, there is obviously no need to suppose either that it is a separate event in experience or that it is necessarily unconscious. When we follow carefully the outline of a house in order to determine its precise shape or measurements, we need not be reflectively aware of what we are doing, but there is no great difficulty in becoming so. And when we analyse what we are doing, we find that we are not only synthesising (in accordance with our concept of house) a manifold given successively in in-

¹ For the sake of simplicity I confine myself to the transcendental synthesis of imagination; but what I have said is equally true of the thought which is at once an element in, and a condition of, experience. Thinking is manifestly a temporal process. Kant himself, speaking of the thought of a mathematical figure, says, 'Thinking itself, *although it happens in time*, takes no account of time'; see *Acht Kleine Aufsätze*, I. If thinking were not in time, how could our awareness of our own thinking be dependent on inner sense? Compare A 357 and many other places.

A fortiori, for Kant knowing must be in time. Knowing is that whole of thought and intuition, of *a priori* and empirical factors, which we call 'experience'; and experience, as he truly insists, is always an advance in time; compare A 210 = B 255. Yet it is too commonly stated as an accepted dogma that for Kant knowing is timeless. One of the many merits of the Master of Balliol's recent book on Kant is that it breaks away from so groundless a tradition.

I do not deny that in the self as it is in itself there must be something corresponding to the successive synthesis which constitutes experience; just as in the thing-in-itself there must be something corresponding to the motion of bodies. But there is as little reason to call the first unknown something a timeless and noumenal synthesis as there is to call the second unknown something a timeless and noumenal motion; and there is as little ground in Kant for the one as for the other.

tuition: we are also synthetising the pure and homogeneous manifold of space.¹ We do not first synthetise the space, and then know the house, but the synthesis of space is none the less the condition of our knowing the house.²

I do not suggest that the synthesis involved in causality has the same charming simplicity, and no doubt it is the difficulty of this synthesis which gives rise to the theories we are considering. It should, however, be observed that the account given by Kant is intended to apply to all the necessary forms of synthesis, and he nowhere suggests that these differ in the respect that some are conscious and some are not. Indeed there is only one synthesis, although within it we can distinguish different aspects.

The theory that the transcendental synthesis is necessarily a pre-conscious and noumenal synthesis is in flat contradiction to Kant's express statements. It is itself fantastic and self-contradictory, and, in my opinion, alien to the whole spirit of the Critical Philosophy. To say that it is nevertheless the logical outcome of the Critical Philosophy rests upon assumptions which seem to me to have no basis either in Kant or in reality.

§ 7. *The Development of Experience*

Kant is under no obligation to give an account of how experience develops or how we come to be aware of objects, and he nowhere offers us such an account. The history of how we come to know objects and the analysis of what is necessarily involved in knowing objects are two different things.

On the question of how we come to know the categories Kant says comparatively little. He recognises that this is a matter for psychology, and he never denies that it is comparatively late in our development before we become conscious of the *a priori* principles which are determining experience throughout.

¹ Compare B 154 and B 162.

² If we substitute the synthesis of substance and accident the same principle holds.

The empirical view is that all our concepts are derived by simple generalisation from experience, and that this is their only justification. If this is true, then all our concepts are necessarily empirical. If we hold that some of our concepts are *a priori*, we must look for another account of their origin.¹ Kant's own view he himself compares to a system of 'epigenesis'.²

The contemporary theory of epigenesis, as propounded by Casper Wolff, was 'that the complex organism of the adult is the result of a progressive differentiation of a comparatively simple embryo in an appropriate environment'.³ Kant believes that in a similar way man is born with a power of thinking which is called into play, and differentiates itself progressively, as the senses are stimulated. Thinking, so far as it is empirical, is determined by the nature of the given manifold; but all thinking, however empirical it may be, must conform to the laws of the understanding itself, of which the law of non-contradiction is the most obvious. It is only late in the development of experience that understanding becomes reflectively conscious of these laws, and is able to consider them in themselves and to grasp their necessity. The laws or forms of thought had, on Kant's view, been stated by Aristotle. It was left for Kant himself to show how they must impose categorial characteristics on all objects of knowledge, and how they are therefore the source of *a priori* cognitions which men had accepted without being able to justify.⁴

Whether Kant is right or wrong about the details, an account of this kind is the only possible account of the general development of *a priori* knowledge: the details can be given only by psychology. The account would have to be modified in certain respects, if we hold that we have *a priori* knowledge of things-

¹ I would remind the reader that the origin of concepts is to be distinguished from their acquisition; see Chapter XVI § 3.

² B 167. For Kant's views on epigenesis, see *K.d.U.* § 81 (V 423-4).

³ See Ward, *A Study in Kant*, p. 55. Ward's criticism on this, as on other points, seems to me unsympathetic.

⁴ Compare A 66 = B 91 and A 184 = B 227.

in-themselves; but no serious thinker maintains that we possess conscious, innate, and *a priori* ideas before experience begins.

§ 8. *The Necessity of Synthesis*

The central doctrine of the Transcendental Deduction, and even of the *Kritik* as a whole, is the view that synthesis is a necessary factor in experience. However unpopular this doctrine may be at the present time,¹ I believe that if we ignore synthesis altogether, there can be no adequate account of experience.

It is possible, and indeed necessary, to take our whole human experience as if it were something merely given, and we can then analyse it in various ways. We can say what kinds of thing we know and what kinds of knowledge we possess. The whole of natural science, very properly, concerns itself only with the kinds of thing we know, and endeavours to know more of them. Even the kinds of knowledge we possess can be taken, with perfect propriety, merely as given, and can be subjected on this basis to both psychological and philosophical analysis. These methods may perhaps be the most fruitful methods of enquiry at the present time; and Kant never questions the value of such methods, nor does he suggest that those who use them are acting illegitimately in regarding objects as things-in-themselves.²

Such enquiries do not touch upon the Kantian problem. They neither explain how synthetic *a priori* judgements are possible, nor set the limits of such judgements. They must either be content to say that we know, and know that we know; or else they must reduce knowledge of necessity to tautology; or else, finally, they must cast doubt upon such knowledge

¹ Some of the objections at least seem to me based on mere misunderstanding. It is too commonly assumed that for Kant synthesis is arbitrary. I hope I have made it clear that this is not so. All synthesis depends upon the given, and what the mind contributes to its object is (in addition to space and time) necessary unity and necessary order. When this is ignored, accounts of Kant's view become mere caricatures.

² Compare A 45 = B 63.

altogether, and discover, by analysis of experience into its given parts, that there is no sort of unity to connect these parts. All these tendencies are prominent in contemporary philosophy.

If we are not content to consider merely what are the kinds or stages of human knowledge, we are forced, it seems to me, to grapple with the part which is played in knowledge by the synthetic activity of the mind.

The plain fact is that we can consider the whole material world, and the whole of human experience, to be *given* to us only because it is given through our own synthesis of thought and imagination. What is given to us at any moment apart from the activity of the mind may be difficult to determine by analysis, and Kant may have restricted it unduly, but it is poor and thin and for ever changing. It is essentially momentary, and yet we know it as momentary only because we synthetise the past and the present. It is in time, but the time in which it is is not given to mere sense; for the time which can be regarded as given to sense is only the present moment,¹ and even that is known as a moment only because we synthetise it with past time, which is no longer given. On this narrow and continually changing basis we build up in thought and imagination, not only our own past history, but the history of a world in space and time, the temporal order of which we distinguish from the temporal order of our knowings. Archimedes claimed that if he were given a point on which to rest a lever he could move the world. We who are given a point, and a continually changing point, on which to base our thinking, are able somehow to construct a universe. So long as we ignore this elementary fact, our philosophies, however valuable, must necessarily be incomplete.

In this procedure the fact that we construct in imagination the one time and space in which all things must be is of fundamental importance. It enables us to test the constructions which we have made, and to distinguish the work of uncontrolled imagination from the work of imagination which is guided

¹ Or, if we prefer it, the specious present.

by thought. The transcendental synthesis of imagination is no mere fiction: it is at work in all our knowledge, and its importance cannot be exaggerated. Whether Kant is right or not in the consequences which he draws from its presence, he was certainly right in drawing attention to the problem, and also in believing that its solution is essential to the understanding of our human experience.

§ 9. *Co-operation of Mind and Reality*

Kant's doctrine asserts that the matter of experience is given to mind by an independent reality, while the form of experience is imposed by the mind itself. It may be objected that such a co-operation between mind and reality is impossible: thought must either determine its object through and through, or else it must do nothing but apprehend what is given.¹

I do not see why this should be so. It is impossible to get a precise analogy for Kant's view, but if we look at the world through blue spectacles, it is the spectacles which make the world look blue; yet the spectacles do not by themselves determine the difference in the shades of blue belonging to different objects.² Again, it is the constitution of our eyes and brain which determines that physical bodies shall appear to us as coloured; but the constitution of our eyes and brain does not by itself determine which particular colours we shall see.

Similarly, according to Kant, it is the constitution of the human mind which makes it necessary for things to appear to us as extensive and intensive quantities in space and time; it is not, however, in the power of the human mind to determine *a priori* the particular quantity which any particular thing must appear to us to have. More important still, the law-abidingness of nature is, according to Kant, imposed by the mind; but it is not the mind by itself which can determine

¹ Broadly speaking, the former view is that of Caird, the latter that of Prichard, though no doubt certain qualifications would have to be added in both cases.

² Compare Chapter VIII § 3.

a priori that a certain combination of hydrogen and oxygen will always result in water.

No doubt such a theory implies that we can know things only as they must appear to us and not as they are in themselves.¹ That, however, is precisely what Kant's doctrine is; and he believes it is compatible with the existence of a common world of experience which must be explored empirically by science, although we have *a priori* knowledge of its categorical characteristics.

Kant's theory is certainly full of difficulties, but so are the other theories to which his is opposed. All I urge is that his view is a serious alternative, which deserves examination as much as the others, and is not to be condemned off-hand as obviously self-contradictory.

§ 10. *Empirical Realism and Transcendental Idealism*

Kant's doctrine does more than attempt to explain and justify our *a priori* knowledge of the phenomenal world: it also confines our *a priori* knowledge, and indeed all our knowledge, to that phenomenal world. The human mind according to Kant can have knowledge only of that which is given to it in sense; and sense-perceptions must be given under the forms of sensibility (time and space) and must be combined in accordance with the principles of synthesis implicit in

¹ Prichard appears to argue that this is impossible, since the word 'know' implies that what we know is known as it is in itself; see *Kant's Theory of Knowledge* pp. 118 ff. and compare pp. 20 ff. This argument, if I have understood it properly, is unconvincing. It is natural enough that ordinary language should carry with it realistic assumptions, and even naïve realistic assumptions. The question is whether further reflexion will justify such assumptions. Besides, if we suppose that the world is really coloured, can we not say in ordinary speech that the colour-blind man knows the world only as it must appear to colour-blind men?

If Kant claimed that this knowledge of the joint product of things and the mind is to be described as knowledge of the thing-in-itself, Prichard's objection would no doubt be valid; but this is what Kant never claims. He does claim that we know the joint product, or the phenomenal world, as it is and must be for any human mind; and I cannot see why this should not be described as knowledge.

thought. If so, it is clear that while we can have knowledge, and *a priori* knowledge, of things as they must appear to human minds, we have no reason whatever to regard such knowledge as knowledge of things as they are in themselves; and we can have no hope of attaining any other type of knowledge than that which we possess.

Such in effect is the result of Kant's transcendental idealism. We must not forget that at the same time it enables him to adopt an attitude of empirical realism towards the phenomenal world. He believes that although, or rather because, the phenomenal world is the joint product of things and the human mind, it must be made up of permanent substances which interact causally in space; and he also believes that the accidents of these permanent substances are directly present to human minds. That is to say, he claims to avoid the errors of representational idealism, and to justify that empirical realism which is natural to science and to common sense.

It is only fair to take both Kant's transcendental idealism and his empirical realism as essential parts of his doctrine; and we must recognise, if we are to understand him at all, that on his view they are mutually interdependent.¹

¹ In this respect they differ from the subjectivism and phenomenalism which are attributed to Kant by Kemp Smith; see, for example, *Commentary*, pp. 270 ff. and many other places. Subjectivism and phenomenalism are alleged to be obscurely felt tendencies which Kant had never thought out, whose inconsistency he had never realised, and between which he oscillated blindly (*Commentary*, p. 227 and p. 272). Unfortunately Kemp Smith regards phenomenalism as involving the view that 'the synthetic processes are of a noumenal character' (p. 275), and that these processes must 'take place and complete themselves before any consciousness can exist at all' (p. 277). Subjectivism he takes to involve the view that 'the synthetic activities consist of the various cognitive processes of the individual mind' (p. 274). I am unable to accept either of these views as satisfactory interpretations of Kant, and so far as phenomenalism involves noumenal synthesis, I do not think it is Kantian at all. I believe that there is a real difficulty in reconciling Kant's view that the phenomenal world exists only in relation to human minds with his view that the phenomenal world is a common world made up of permanent physical substances in space. The former view might reasonably be called 'subjectivism' and the latter 'phenomenalism', and I believe that

§ 11. *Limits of the Present Argument*

Throughout the whole of this exposition I have sought to dwell mainly upon the reality of the factors found in experience by Kant and the plausibility of his theories about them; but I do not wish to give the impression that his theories offer the only possible interpretation of these factors, and still less that his theories are devoid of difficulty.

I have insisted, for example, that synthesis is a real factor in experience, and that if it is ignored, no account of experience can be complete. Such a contention is not intended to imply that the presence of synthesis in experience is by itself a sufficient refutation of realistic philosophies. It may be possible to maintain that synthesis is merely a taking up and holding together of what already exists in combination in a reality independent of the mind.¹ Even if that were so,² it would still be necessary to remember that the synthesis in question is a synthesis of times and spaces, and from this fact important consequences might spring. Our main concern, however, is Kant's view that the synthesis of times and spaces must conform to the principles of synthesis implicit in judgement. At the present stage of the argument that view should be regarded as neither arbitrary nor unreasonable. Our task is to understand it so that we can appreciate Kant's attempts to work it out in detail later.

Similarly we need not attempt at the present stage to face the difficulties which are raised by Kant's doctrine as a whole;

Kemp Smith is in part attempting to deal with this opposition. But if so, he seems to me to misdescribe both the factors in this opposition; and when Kant's subjectivism and phenomenalism are taken in this sense, it is absolutely essential to recognise that Kant believed them to be mutually interdependent.

¹ The fact of synthesis is fully recognised, for example, in Price's *Perception*, and although he works on a realistic basis, he has, if I mistake not, learned a great deal from Immanuel Kant.

² I cannot see how it could be so without involving us in a doctrine of pre-established harmony, if we admit, as I think Price does, that the form of our synthesis is *a priori*; and I find it difficult to believe that any doctrine of pre-established harmony can be satisfactory.

and indeed we are not in a position to do so until we have gone much further into the details. The central difficulty, as I see it, is how we can have a common phenomenal world, or common world of experience, if the matter of that world is made up of our private sense-impressions, and the form is due to the nature of human sensibility and human thought.¹ There are countless other difficulties, notably as to the place of secondary qualities in this common world and the relation between the history of the individual mind on the one hand and the succession of changes in the physical world on the other. How far Kant offers, or is capable of offering, a solution of these difficulties is a question upon which opinions may differ. We ought indeed to be aware of these difficulties already, and we should have an entirely false view of the argument, if we supposed that they had already found their solution; yet our only hope of understanding Kant is not to raise these problems prematurely, but to follow, as best we can, the development of his argument.

¹ I have touched upon this difficulty in Chapter XXIV § 4. Here I would merely remind the reader that the common objective world is the world as it must appear to human consciousness as such, or to consciousness *in general*, not the world as it must appear merely to an individual mind. Kant deals throughout, not with the individual acts of the individual mind as such with all its peculiarities, but with those elements in all individual mental acts which are necessary to experience; and the world whose character he seeks to establish is the world as it must be for science.